FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

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No. 2206.-Vol. XLVII.

LONDON, SATURDAY, DECEMBER 1, 1877.

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10 Bolidris.

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10 Chapel House, £3 6s.

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10 Combmartin, 3s. 9d.

10 Combmartin, 3s. 9d.

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10 Exchequer, £8 6d.

10 Frontino, £2 13s. 9d.

11 Flagstaff, £2 3s. 9d.

12 Capelling, £4 18s. 3d.

13 Corneadd and Mer., £8

14 Gorsedd and Mer., £8

15 Grogwinion.

16 Gryn, 9s. 9d.

16 Of, Western Colliery

(fally paid). 20 Pateley Bridge.
30 Penstruthal, 6s. 3d.
25 Pestarena, 6s. 9d.
50 Parvy Moun., 11s. 6d.
25 Port Phillip, 12s. 9d.
50 Rookhope, 24s.
20 Richmond, £9 2s. 6d.
5 Roman Grav., £8.
25 Red Rock, 36s.
10 S. Condurrow, £93/,
50 Tankerville, £4 18s. 9d.
50 Van Consols, 9s. 9d.
20 W. Tankerville, 16s.
10 West Chiverton, £14.
100 W. Combmartin, 5s.
100 Yorke Peninsula, 8s. 9d.

1964. Western Country of the Country of the Country of the Country of the Country of There Months)

on Deposit of Twenty per Cent.

BUSINESS also on hand in — East Craven Moor, Lisburne, Last Chance, New Zealand Kapanga, Pennant, Paudora, Plynlimmon, Santa Barbara, West

New Zealand Kapanga, reunanc, a a survey and Kapanga, reunanc, a wye Valley. Wye Valley. BUYER of 5 Copiapo, 100 Port Nigel, 5 West Prussian Mining.

TIN SHARES, AND THE RISE IN TIN.—SPECIAL BUSINESS at close prices in Cara Brea, Cook's Kitchen, Dolcoath, East Lorell, South Condurrow, Tincroft, Wheal Agar, Peevor, Grenville, Uny, Wheal

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10 Halcomb Sack.

10 Halcomb Sack.

10 Halcomb Sack.

10 Halcomb Hotel.

10 Langdam Langdam Hotel.

10 Langdam 20 Milner's Safe.
30 Newcastle Chemical.
20 North Metropolitan Tramway.
10 Pawson and Co.;
100 Positive Life Assurance.
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50 Huitafall.
30 Javali, 7s. 6d.
40 Kapanga, 23s. 6d.
25 Lust Chance, 20s. 6d.
20 Leadhills, £43;
30 Marke Valley, 16s. 6d.
100 North Laxey, 9s. 9d.
20 N. Quebrada, £2 Ils 3
50 Port Phillip, 14s.
35 Penstruthal, 6s. 9d.
40 Parys Mount., 12s.
10 Pateley Bridge, £436
15 Roman Grav., £7 18 9
150 Brewert Company. 50 Eberhardt. £7%.
50 East Caradon, 21s.
50 East Lovell, 21s.
50 Flast Lovell, 21s.
50 Flastaff, £2 3s. 9d.
60 Prontino, £2%.
60 Great Laxey, £22.

DEFORMAN

£2½.
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Fingstaff, £2 2s. 6d.

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Chontales, 12s.
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Eberhardt, £7.
Flagstaff, £2 2s. 6d.
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Last Chance, 18s.
N. Zealand Kap., 25s.
Port Phillip, 12s. 6d.
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Growlindo, £4\(\frac{\pi}{\pi}\). South Frances, £3\(\pi_{\pi}\). Eberhardt, £7. Holmbus, £5\(\pi_{\pi}\). Tankerville, £5. Ladawell, 21s. 3d. W. Tankerville, 15s. 6d. Hultafall. Lanrwst, £2\(\pi_{\pi}\). Wheal Grenville, £3\(\pi_{\pi}\). Lads Chance, £3\(\pi_{\pi}\). North Laxey, 9s. 6d. Wheal Kitty, £2\(\pi_{\pi}\). N. Zealand Kap., £5s. Parys Mountain, 10s. 9d West Mye Valley, Parys Mountain, 10s. 9d West Wye Valley, 4s. Richmond, £9. Parlely Bridge, £4. Assheton, Cambrian, Caro Brea, Combellack, Derwent, Devon Consols, Wheal Crebor, Wheal Newton. — Argentine, Almada, Chicago, Colorado, Don Pedro, I.X.L., Javali, Malabar, South Aurora, Yorke Penissula. COLLIERIES.—Alltami, Bilson and Crump, Chapel House, Cardiff and Swansea, Great Western, New Sharlston, Newport Abercarn, and Thorp's Gawber. MISCELLANEOUS.—Devonport and Tiverton Brewery, Credit Foncier, Diamond Rock, Ebbw Vale, General Credit, Hudson's Bay, National Steam, Native Guano, Tramway, and Aquarium Shares.

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effected at an intermedia					
1	Buyers. 6	Bellers.	Buye	rs. 8	ellers.
Aberdaunant 2	s. 6d	58.	Marke Valley 1	58	17s.
Cambrian	2 2	£ 21/4	North Laxey 9	8	10s.
Chicago	2	214	New Quebrada	21/	214
Chontales	10s	12s. 6d	New Zealand Kapanga	1	114
Derwent	13/4	2	Parys Mountain 10	s	lls.
Devon Great Consols	21/2	23/4	Pateley Bridge	314	4
Dolcoath	37		Richmond (ex div.)	9	91/4
Don Pedro	88	10s.	Roman Gravels	736	8
Eberhardt	614	7	Rookhope21	s.6d	3s.6d
East Caradon	1	1%	San Pedro	14	3/4
East Van	4	41/2	South Condurrow	9	91/4
Exchequer Gold	48	6s.	Tankerville	41/4	43/4
Flagstaff	21/3	21/4	Tincroft	1614	1716
Frontino	21/2	23/4	Van	32	33
Glenroy		17s. 6d.	Van Consols 5	9	10s.
Glyn	54	10s.	West Chiverton	13	
Gorsedd and Merllyn	5	536	West Pateley Bridge	1	11/6
Great Laxey	21	23	West Godolphin	116	2
Hingston	58	10s.	West Tankerville	Os	158.
Huitafall	5	536	West Wye Valley	3	
Last Chance	34		W. Grenville	3	814
	158		Wheal Kitty	2	216
Llanrwst	216		Wye Vailey	2	21/4
Leadhills	436	434			
M D Boolesses on he	- A In O.		Manka Walley Tleamant	O	A A

N.B.—Business on hand in Cambrian, Marke Valley, Lianr Merilyn, Rookhope, and South Condurrow at prices quoted. SELLER of 100 Leadhills at £4 12s. 6d. net.

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Lectures on Bractical Mining in Germany.

CLAUSTHAL MINING SCHOOL NOTES-No. LIII. BY J. CLARK JEFFERSON, A.R.S.M., WH. SC., Certificated Mining Engineer. (Formerly Student at the Royal Bergakademie, Clausthal), [The Author reserves the right of reproduction.]

From the table given in our last it will be seen that the 200 ft. driven by hand occupied 13½ months, giving an average of 15 ft. advance per month. The machine boring occupied six months giving an advance of 38 ft. per month, or 2½ times as fast. It must be mentioned, however, that as the carriage in this first construction of Sach's did not allow of boring by the machine in the floor, the boring in the floor was done the whole time by hand. The rock was a quartzose grauwacke, or slate, with occasional milder strata. There were always two machines at work at the same time. In July, 1864, when the machine was got into proper order, an advance of 16 ft. 8 in. in the week was twice obtained as the best resuit. During the first half of the month an advance of 30 ft. was made; during the second, in consequence of meeting with a quartz bank, which let in very considerable quantities of water, the alvance made was only 20 ft. In August, when the calamine deposit was approached, the rock became much milder. All circumstances being considered, the advance may be said to have been at the least twice as fast with the machine as by hand. Each machine had two attendants, but until the miners had become more accustomed to them a mechanic was added, who also attended to the repairing. &c., of the machines, so that there were always five men and two machines before the end face. The shifts were at the commencement eight hours, but as the level became exceedingly wet they were increased in number to four of six hours each. During the twelve night hours the hand bering in the floor of the level took place, the machine boring taking place during the day time. As a rule four holes, each under 15 in. deep, were borel and fired by the miners in a shift of six hours; with the machine from six to eight holes, of a depth varying between 17 and 36 in., were repeatedly bored and fired and the debris cleared in the same time.

The financial result is greatly influenced by the fact that the machines were at work for comperatively so short SECTION III. From the table given in our last it will be seen that the 200 ft

Powder, fuse, &c..... Air compressor

From which we obtain ll. 4s. as the cost per cubic yard of the rock won, whilst the cost per cubic yard with hand boring amounted to 1l. 13s. 4d.

to 11.13s. 4d.

The smaller machine, designed to be used with a pressure of two or more atmospheres, has since been much improved by Sach, and its improved construction extensively used in Germany. In this construction the arrangement for impacting a rocking motion to the cross pin is somewhat different. Instead of the cross head a small hinge is bolted to the end of the back pisten rod, and attached to this hinge is along pin, which passes through a long hollow cylindrical socket, forming one of the arms of the rocking pin. Only the ratchet wheel, which imparts a gradual rotatory motion to the borer, is centred on the piston rod, the ratchet wheel only the ratchet wheel, which imparts a gradual rotatory mo-tion to the borer, is centred on the piston rod, the ratchet wheel for producing a gradual forward feed of the machine is centred directly on the long round screwed bar, forming part of the frame. The backward motion of the machine can be effected by a handle. through the intervention of a pair of bevil wheels, one of which is centred on the nut and attached to it; the other, which is at right angles, is centred on a strong pin screwed into the lug which contains the nut. In still later constructions Such made the nuts in

angles, is centred on a strong pin screwed into the lug which contains the nut. In still later constructions Such made the nuts in two halves, connected with a hinge, so that when it was desired to withdraw the cylinder in order to insert a fresh borer, it was only necessary to open the nut and slide the machine back by hand.

The disposition of the drill on the carriage, and its weight, was perhaps the greatest disadvantage connected with the first of Sach's machines. For the purpose of removing this objection a different arrangement of the carriage was designed by Döring. This consists of a cast-iron bed plate, which is fixed upon four wheels; to the front end of this bed plate a strong column, with grooves turned in it, which serve the purpose of a rack; the top of the column is bolted to a short cross piece of angle iron, and besides wedged tight against the top of the drift, or level. The short cross piece is rivetted at the top to two back pieces of angle iron, which pass backwards to two uprights of angle iron. The column is clasped by a cast-iron muff, and when not tightened by screws can be slid up and down the column by meuns of a worm wheel and a small screw, the arrangement being exactly the same as that found in many drilling machines. A second muff is cast in the same piece with the first, but at right angles to it, and through this a round bar passes, which can be rotated about its axis. The arrangement by which this bar can be pushed forward or backward through this second muff is exactly the same as that by which the first muff can be raised or lowered. This har carriage at its end a ring on second muff is exactly the same as that by which the first muff can be raised or lowered. This bar carries at its end a ring, on which a forked arrangement for carrying the drill rests, and about which it can be rotated as a centre. By this means the drill can be raised or lowered in a vertical plane, and pushed backwards or forwards in a horizontal plane, and since the bar can be movel about its axis the machine can be placed in any position or at any inclination desired. inclination desired.

For sinking purposes the drill has a very simple frame arrangement. The two ends of the bars forming the frame are connected with a semicircular cross piece with two lugs, on to which the ends with a semicircular cross piece with two lugs, on to which the ends of the round bar are clamped; the lower cross piece has two short bars, or pins, bolted to it, and which rest on the ground; the cross piece at the top has a hinge formed on it, by which a long leg, or bar, is attached, and which can be lengthened or shortened. The means of a short chain hung from the upper cross piece several heavy weights can be suspended to steady the machine. Many of the workmen find it more convenient to dispense with the use of the back leg, and by leaning against the top of the machine, and grasping the short wooden handles fixed to the top cross piece, they can hold the machine sufficiently steady, and fix it almost instantaneously in any desired position.

taneously in any desired position.

The Universal Standard designed by the Humboldt Actiengesellhaft is one of the best arrangements that has been devised on the Continent for fixing boring machines when driving drifts and cross-cuts. It consists of a strong round standard, bolted down to a cast-iron plate, which runs upon four wheels on an ordinary 2 ft. guage line of rails. The standard is turned with a number of square-shaped rings on its surface, as in the case of the carriage designed by Döring. A muff embraces the standard, and can be raised or lowered on the standard in a similar manner, the whole arrangement, except the carriage, being very similar to Döring's. The top of the standard is hollow, and is tapped, a long strong screw fitting in the upper end; by the means of one or two cross handles pa-sing through holes drilled in the screw the latter can be screwed so far out as to bind pretty tightly against the top of the level, fixing the frame firmly and securely. With this frame not more than 5 or 6 minutes are required by the workmen for fixing the drill in any desired position.

One of the boring machines which has in an improved form come into very extensive use is that devised as early as 1865, and afterwards exhibited by the inventor, Haupt, in the Paris Exhibition of wards exhibited by the inventor, Haupt, in the Paris Exhibition of 1867. Haupt's machine was designed to be driven by steam, which

was generated in a small portable boiler, fixed in the mine itself the exhaust steam being carried off with the return air current by means of a fan. The frame for the machines consisted of two or more round iron columns, which by the means of screws could be tightened against the roof, the lower ends of the columns being attached to a strong cross piece, which was fixed to a set of three legs. This cross piece is hollow, and divided in the middle by a cross casting, the one side serving as the inlet for the steam to the machine, and to which the steam pipes are attached, the other serving as the outlet for the schaust steam. The drill can be placed at any inclination in a vertical plane, and moved through 90° in a horizontal plane. The machine itself is about 30 in, long, weighing about 140 ibs. The cylinder is about 4 in, long and 4 in, diameter, and at a pressure of 4 atmospheres makes from 350 to 400 blows per minute, giving a piston velocity of from 4 to 5 ft, per second. The piston rod is about 24 in, in diameter, so that the total pressure during the forward stroke which strikes the blow is much greater than that during the return stroke, and is besides hollow, so that the borer can be inserted from behind, and changed for a tresh one when the first has become blunted, without having to withdraw the cylinder. The balanced slide valve consists of a circular tube, that fits tight against the sides of the cylindrical valve chest by means of four well fitting rings. The valve spindle, which passes through the cylindrical valve, is not rigidly connected to the valve but in the following manner. Attached to the valve spindle within the valve is a small piston, and in both ends of the valve a large ring is screwed. On each side of the piston, and between it and the ring, is a strong spiral spring, which has been compressed by screwing screwed. On each side of the piston, and between it and the ring, is a strong spiral spring, which has been compressed by screwing in of the ring. By this arrangement the motion of the valve spindle or piston of the valve spindle is not communicated directly to the valve, but the valve is the relation of the valve spindle is not communicated. dle or piston of the valve spindle is not communicated directly to the valve, but through the intervention of the springs, and consequently the reverse motion of the valve spindle is first participated in by the valve, when the tension of one of the springs is so much increased by compression as to overcome the inertia of the valve; and during the short interval thus required the piston rod of the main cylinder carrying the bofer has time to complete its stroke before the steam enters in front of the piston to drive it back. The piston rod carries a short arm, which striking against an arrangement of earther and applied and arrangement of earther and applied to the reduceroise artists of the piston rod carries a short arm, which striking against an arrangement of catches and springs causes the reciprocating motion of the valve spindle. By means of this same arm and a ratchet wheel attached to the piston rod the latter is gradually rotated during every return stroke of the piston rod. By means of a spring and groove the borer is compelled to rotate with the piston rod; a catch prevents the borer slipping or rotating in the opposite direction within the piston rod. The cylinder is fixed so that the borer alone is pushed forward as the hole gets gradually deeper: this is effected by a screw and ratchet wheel, which is rotated by the return stroke of the piston rod. The drill of Haupt has been very extensively used in America, and notably so in the driving of the Hoosac Tunnel. Hoosac Tunnel.

Soon after the invention of the Haupt rock-drill a Mr. McKean endeavoured to introduce it into England. The use of steam was a great disadvantage in connection with the Haupt drill, and the use of springs for driving the valve-gear is also objectionable in such high speed machines as the rock drill. After several years experience Mr. McKean introduced so many alterations and improvements in the Haupt drill as to produce an ellipset to taking different process. in the Haupt drill as to produce an almost totally different ma-chine, which has since been most extensively used in this country and abroad. In the McKean drill the cylinder, valve-chest, and frame for carrying the guides and bearings for the piston-rod, valverods, and other parts of the machine are cast in one piece, which is nearly oval in cross sections. Within the valve-chest an accurate y turned cylinder is fitted, which forms the valve seating and extends turned cylinder is fitted, which forms the valve seating and extends nearly the whole length of the cylinder. The admission ports in the valve seating extend nearly the whole length of the cylinder forming the valve seating, where, however, they enter the main cylinder they are of but a very small depth. The same device is made use of in this as in the other rock-drills we have noticed for cushionuse of in this as in the other rock-dril's we have noticed for cushioning—i.e., of having the admission ports situated at a short distance from the ends of the cylinder. The extension of the admission ports along the whole length of the cylinder forming the valve seating will lead to a considerable loss of steam or compressed air in clearance. The valve itself forms a hollow cylinder with its axis parallel to that of the main cylinder, and extends from one end of the valve-chest to the other; the front end is open and communicates with a ripe screwed into the end of the valve-chest forming the exhaust-pipe. The inside of this cylindrical valve, therefore, forms a portion of the exhaust-pipe, the steam or compressed-sir from the holler or pipe. The inside of this cylindrical valve, did to the boiler or of the exhaust-pipe, the steam or compressed air from the boiler or in the extratorphy, the annular space left between the valve ind the valve seating. On one side of the valve extending the whole length of the valve is a projecting face curved to fit against whole length of the valve is a projecting face curved to fit against the inside of the cylinder forming the valve seating. Extending nearly the whole length of this projection is a central slit communicating with the inside of the valve. By a partial reciprocating rotation of the valve about its axis it alternately uncovers (allowing the compressed-air to enter) and covers, preventing the entrance of compressed-air through the admission ports, and during the time that one of the admission ports is uncovered the other is opposite the long slit in the projecting part of the valve, and is thus in communication with the inside of the valve, and consequently with the exhaust pipe. The action is exactly analogous to that of an ordina y slide valve taking place on a concave instead of on a flat valve seating. The back end of the valve is solid, and has a groove cut diametrically across it. To the end of the valve spindle is a cylindrical shoulder turned to fit the circular valve seating perfectly stram-tight, and on the front (with respect to the machine) flatend of the shoulder is a projecting piece which fits in the groove in the back solid end of the valve. The back end of the valve cheat is screwed, into which a circular ring is screwed up against the shoulder on the valve spindle; not so tight, however, as to prevent the valve screwed, into which a circularring is screwed up against the shoulder on the valve spindle; not so tight, however, as to prevent the valve spindle and valve being readily rotated, but sufficiently so to prevent any excessive motion of the valve; the valve spindle pisses through the circular ring, and bears in a round hole in the extreme back end of the casting forming the frame of the machine. By means of the above-mentioned groove in the solid end of the valve and the projecting piece on the shoulder of the valve spindle, the o-ciliating movement of the latter is imparted to the valve. The valve spindle is actuated by means of tappets which are attached to a sleeve fastened upon the valve spindle, and these are placed at such angle or inclination on each side of the central plane passing.

to a sleeve fastened upon the valve spindle, and these are placed at such angle or inclination on each side of the central plane passing through the axes of the valve spindle and piston-rod that they are struck alternately by an enlarge-ment formed on the piston-rod. The piston-rod, which passes through both ends of the cylinder, and the piston are formed in one piece of steel. The piston has two broad grooves cut in it, in each of which a pair of metallic piston rings are inserted. The portion of the piston rod which passes through the front end of the cylinder and carries the borer is larger, and consequently stronger, as it ought to be than the portion of the piston rod passing through the back end of the cylinder, which thus gives a larger area, and consequently a greater pressure on the back gives a larger area, and consequently a greater pressure on the back end of the piston during the forward blow, than on the front end of the piston during the return stroke. The borer is keyed or cottered into the front end of the piston rod; the attachment may be made adjustable by means of a nut which fits on to the extreme end of the piston rod, which latter is screwed as far as the cotter hole. The face of the nut has a groove cut in it which, when the nut is crewed tight up, caincides with the cotter hole, so that when the r is criven in there is no possibility of the cotter shaking and the borer is thus held always firmly and rigidly. A cross the form of borer principally used.

The extreme end of the piston rod passing through the back end The extreme end of the piston rod passing through the back end of the cylinder slides in a bearing formed in the end of the casting forming the frame of the drill. The piston rod is, therefore, supported in three places, and it is claimed for this machine that this arrangement gives greater steadiness during working, on account of the chief moving part being thus supported in three places along its length. This portion of the piston rod has an enlargement formed by two conical faces, and a straight piece between them, and it is by the striking of these conical faces the one against one of the tappets and the other against the other tappet that the oscillating motion of the valve spindle is caused. As these tappets on lating motion of the valve spindle is caused. As these tappets on being unclamped can not only be slid backwards and forwards on

the valve spindle but also clamped at any inclination desired, it will the evident that by this arrangement the position and angle of the tappets can be adjusted at will to regulate the distribution of the

tappets can be adjusted at will to regulate the distribution of the steam or compressed air.

The straight portion of the enlargement between the conical surfaces on the back portion of the picton rod has ratchet teeth cut in it in an inclined or oblique direction. On schort spindle with its axis parallel to that of the piston rod is a groved or fluted cylinder (which fits the teeth in the straight portion of the enlargement of the piston rod), and a small ratchet wheel having its motion checked in one direction by a pawl. During the forward stroke of the piston the teeth (on the enlargement of the piston rod) drive the fluted cylinder and spindle, the rotation being allowed by the small ratchet wheel; during the return stroke the pawl arrests the motion of the small ratchet wheel, and with it the spindle and fluted cylinder, the grooves on which and on the enlargement of the piston rod being oblique, the piston rod is compelled to rotate slightly, the amount of rotation being such that for a complete rotation of the cutting tool 16 blows are required. cutting tool 16 blows are required.

GEOLOGICAL SOCIETY OF LONDON.

JOHN EVANS, F.R.S., D.C.L. (Vice President), in the chair.

Nov. 21—John Evans, F.R.S., D.C.L. (Vice President), in the chair.

Oswald Fitch, Highbury New Park; John Hadkinson, Brunswickstreet, Liverpool; B. Holgate, engineer, Atkinson street, Hunslet,
Leeds; H. F. Parsons, M.D., Goole, York-hire; and Edgar P. Rathbone, Duke of Norfolk's Nunnery Colliery offices. Sheffield, were
elected Fellows of the society. — William Frean, B.Sc., Lond, Professor of Natural History in the Royal Agricultural College, Cirencester; J. G. Hochstätter Godfrey, late Chief Geologist and Mining
Engineer to the Government of Japan, London; Herbert Goss, F.L.S.,
Surbiton Hill; Jenkin Jones Ingram, York-street, Lambeth, John
Fowke Lancelot Rolleston, St. Peter's-terrace, Leicester; and Fred.
Adolphus Alexander Simons, Manley-terrace, Kennington Park, were
proposed as Fellows of the Society. ——Isaac Bayley Balfour, M.B.,
D.Sc., Inverleith-row, Edinburgh; David Burns, Geological Survey
of England, Jermyn-street; Samuel Cooke, M.A., Assoc, Inst. C.E.,
Professor of Chemistry and Geology, Poena Civil Engineering College, Bombay; Henry Drummond, Glen Elm Lodge, Stilling; Sandford Fleming, C.M.G. M. Inst. C.E., Durham Villas, Kensington; Rev.
John Hodgson, M.A., Kinver, Staffordshire; W.m. Etheldred Jennings,
R.A., School of Munes, Sydney, New South Walse, Heavy M. ford Fleming, C.M.G., M. Inst. C.E., Durham Villas, Kensington; Rev. John Hodgson, M.A., Kinver, Staffordshire; Wm. Etheldred Jennings, B.A., School of Mines, Sydney, New South Wales; Henry Merryweather, Fairholme, Clapham; Robert Robinson, M. Inst. C.E., Westterrace, Darlington; Martin Stewart, B.A., York House, Wakefield; George Eastlake Thoms, Wolverhampton; Robert F. Tomes, Weston-Avon, Stratford-on-Avon; and Irwine John Whitty, M. Inst. C.E., Chinidah; East Indian Railway, Bengal, will be balloted for as Fellowship. of Giridhi, East Indian Railway, Bengal, will be balloted for as Fel-

of Giridhi, East Indian Railway, Bengal, will be balloted for as Fellows of the society.

The following communications were read:—

1.—"On the Glacial Deposits of West Cheshire, together with lists of the Fauna found in the Driftof Cheshire and adjoining Counties."

By W. Shone, F.G.S.

2.—"The Moffat Series." By C. Lapworth, F.G.S.

The fossils found in the highly convoluted Lower Silurian rocks of the southern uplands of Scotland are usually restricted to certain narrow bands of black carbonaceous and graptolitic shales, which, from their especial abundance in the neighbourhood of the town of Moffat, Dumfriesshire, are known to geologists as the Moffat shales, or Moffat series.

EXHIBITION OF THE CORNWALL MINING INSTITUTE.

EXHIBITION OF THE CORNWALL MINING INSTITUTE.

So great was the success achieved by the first exhibition of the Cornwall Mining Institute that the Committee wisely determined to keep it open three days instead of two. The attendance was large, and the proceedings so well varied with concerts and addresses, including one from the President, Dr. Foster, as to be enjoyable to the general public as well as to the more practical visitors. We were unable last week to give the result of the trials of the rock drills, which took place on Friday, and which completed the task of the official committee of inspection. They were very interesting; the machines being tested on one of the hardest and toughest blocks of greenstone to be found in the district, provided by Capt. Hosking at South Roskear; but the results singularly bore out our anticipatory remarks of last week as to the unsatisfactory character of any mere working trial of this kind. Of the three machines worked, the Ingersoil and McKean did excellently, but the Barrow could not be "got to go": and yet we all know not only that the Barrow is doing most admirable work at Dolcoath, but that it was the first boring machine found practically applicable to Cornish mining. The Beaumont did not put in an appearance, so that it is idle to speculate what its fate would have been. Like the Barrow, however, its value has been thoroughly proved in extended mining operations. Trials of this sort have their uses no doubt, but they need to be reregarded with care. Many a machine may drive a few holes admirably that would be unsuited for general mining work; and here we find an excellent practical machine break down from some accidental cause at the test. Of course, under the circumstances, only the McKean and Ingersoil could be certificated. Some interesting experiments were made with dynamite by Capt. Chas. Thomas; and the electric blasting apparatus of Mr. Brain, which was shown by Mr. Cuthbertson, also had a certificate. Other certificates were awarded to Mr. Hosking provided

now in use in South Roskear Mine, and the drill now experimented with had been doing good duty until that morning underground. It was started at 241 P.M., and after working for nine minutes it was stopped, and the hole was found to be 7 in. deep. The borer was changed and the work recommenced at 253—that was to say, after an interval of three minutes. It would not take so long to change the borer in actual practice, but a little delay was caused by measuring the depth of the hole, and by persons pressing round to see the machine. After five minutes further boring the machine was stopped, and the hole was found to be 13 in. d-ep. The borer was again changed, and at 31 P.M. the drill started again, boring with a new bit till 37, when the hole was found to be 22 in. deep. An ordinary chisel bit was used, 2 in. wide. In all 22 in. were bored in twenty-six minutes, including six minutes, for stoppages. The McKean drill is usually worked with an automatic feed, but it was noticed that the man in charge had to attend a good deal to the feed noticed that the man in charge had to attend a good deal to the fe

noticed that the man in charge had to attend a good deal to the feed himself. Considering the hardness and fineness of the stuff, the result obtained was thought decidedly satisfactory.

The little Ingersoll was next fixed to the cross-bar, and began work at 3:20 p.m., and stopped at 3:23 p.m., when it was found that 4 inches had been hored. The borer was changed, and the machine started at 3:24, and worked till 3:30. The hole was then 14½ in. deep The drill had then bored 10½ in, in very hard and tough greenstons, in six minutes. Unfortunately, there was not a third borer to fit the hole, which could not, therefore, be carried deeper. However, the result of the trial was eminently satisfactory, 14½ in. having been bored in ten minutes, including stoppages. The persons present were much pleased with the Ingersoil drill. The feed was perfectly the result of the trial was eminently satisfactory, 122 means present bored in ten minutes, including stoppages. The persons present were much pleased with the Ingersoil drill. The feed was perfectly automatic, and the man in charge had not to touch the machine, but merely look on and see it do its work. A cross-bit, sometimes called a diamond-bit, was used. The last trial was made with the Barrow drill, but unfortunately, owing to want of sufficient preparations on the part of the exhibitors, this excellent drill did not do good work. Learning and examples at Dolcoath for more than a year has been so respectively. Its performance at Dolcoath for more than a year has been so remarkable, both as regards the speed of driving and economy of working, that its want of success at South Roskear must not be

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Being Notes on a Course of Lectures on Mining, delivered by Herr Bergrath, Dr. Von Grondback, Director of the Royal Bergakademis, Clausthal, The Harz, Borth Garmany.

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1877.

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THE MINING JOURNAL.

The second of the machine, which is the simplest of all segments and the mining of the mining the mining of the mining of the mining of the mining the mining of th

NATIONAL ASSOCIATION OF CERTIFICATED COLLIERY
MANAGERS.

Amesting of the members of the above society was held on Saturdia, at the Brunswick Hotel, Manchester, the chair being occupied of a present of a working secretary for the Association, and several gleations for the post which had been received were laid before gleations for the post which had been received were laid before meeting and considered—Mr. George H. Powell, of Birmingham, of the principal colliery displays the Birmingham, we grant to two would be desirable that settings for the furtherance of the objects of the Association should be about the setting and considered, and arrangements were made for holding settings to Birmingham, Wigan, Wakefield, Nawport (Mon.), Notsepalm, Darham, Newcastle-upon-Tyne, and Whitehaven.

Addienson next took place with reference to the recent speeches of Relevance and the setting against those unjustifiable and scandals remarks, beg to tender their thanks to Mr. John Brown, of Hedischell, Mr. P., and Lord Kinnaird; and ultimately it was sufficiently and the setting against those unjustifiable and scandals remarks, beg to tender their thanks to Mr. John Brown, of Hedischell, the menty and straightforward manner in which he had addeated the rights and posttion of colliery managers, and also to gother correspondents in the trale journals, and to the Press and bott the United Kingdom, who had so fully demonstrated the blacy the advice given to the working colliers by one of the above-amendation. The state of the desired for the desire manisation as suggested. The thanks of the meeting were given to Mr. Powell for his paper.

THE BLANTYRE MINE EXPLOSION.

THE BLANTIRE MINE EXPLOSION.

We have been requested to insert the following correspondence between Lord Kinnaird and Mr. Macdonald. M.P.:—

Newhall, Hamiiton, Nov. 9, 1877.

My Lord,—I am quite at one with you as regards the fire-damp indicator. You will remember how much interest I took in it when exhibited. I believe its compilery adoption would be of great benefit to the mineowners themselves. It believe in the second of the sec

Town on. Growth of the state of

The Right Hon. Lord Kinnaird, Rossie Priory.

The Right Hon. Lord Kinnaird, Rossie Priory.

Rossie Priory, Inchture, Nov. 24, 187.

Dark Sir.,—I am pleased to find that with all your experience of the working the Mines Regulation Act you are still of the opinion that had we succeeled in thing the proxi-dons we wished inset ted in that Bill in its passage through Parliment that an immense saving of valuable lives would have been effected. I quie agree witness saving of valuable lives would have been effected. I quie agree witness saving of valuable lives would have been effected. I quie agree witness saving of valuable lives would have been effected. I guie agree witness saving of valuable lives would have been effected. I guie agree the difficulties we had to encounter we were glad to get the Bill through the slave of the difficulties we had to encounter we were glad to get the Bill through the slave of the difficulties we had to encounter we were glad to get the Bill through the slave of the surface, so will remember that at the time of the passing of the Bill we forested that the unit remember that at the time of the passing of the Bill we forested that the wulld prove to be so, and something like my proposal, which was been discussed, must be adopted, viz.—That the capitan in metal mines, the strength of the fireman in coal mines shall, after his daily inspection, repair to the office the surface, and cuter his report in a register kept in the office, open to the formation is a surface. The surface is a register kept in the office, open to the face and the remain merely keeping a book for his own information is a surface. The surface are proposed to the formation is the evidence given at the enquiry now going on as to the cause of the lative explosion. How can any fireman, without the fire-damp indicator, tell

Meetings of Public Companies.

DEVON GREAT CONSOLS MINING COMPANY.

DEVON GREAT CONSOLS MINING COMPANY.

The ordinary half-yearly general meeting of shareholders was held at the offices of the company, Greshau House, on Wednesday,

Mr. Petern Warson in the chair.

Mr. A. ALEN (the secretary) real the notice convening the meeting; the report of the directors was as follows;—

The directors of the Devon Great Comols Company (Limited) regret that they are unable to submit to the shareholders at the present meeting to devariable a turn had taken place in the affairs of the company, and they had it in their power soon after the meeting to devare a dividend of S. per chare (259M), which was plat on July Text. Since then, however, conviderable depression has taken place throught into the present account) Instead of S. per chare (259M), which was plat on July Text. Since then, however, conviderable depression has taken place throught into the present account) Instead of S. per chare (250M), which was plat on July Text. Since then, however, conviderable depression has taken place throught into the present account) Instead of Text limit (150M), which was plat on July Text. Since then, however, conviderable depression in a taken place throught into the present account of Text limit (150M), and the present account of the p as a matter of course, but at the same time there should not be that serious difference, but it had now continued for some months, and he feared would be continued till the company took some action to protect its own interests. The directors thought that the smelters, notwithstanding the depressed state of the copper trade, should certainly give this company a better price. That brought him to what was stated by Mr. John Pender, M.P., at the recent meeting of the Panulcilio Copper, where they had sold a large quantity of copper with scarcely any profit. The Cape Copper Company had made some arrangements for smelting 6000 tons of their ore, by which they anticipated they would get a better price. The Rio Tinto Company had sold enormous quantities of stuff, but there was unfortunately no profit left for the original shareholders after the payment of the debenture-holders. The Quebrada Company were suffering in a similar my, and at the recent meeting of the Scottish Australian Company he noticed that his friend Mr. Adolphus Young, M.P., also called attention to this very serious matter. And this brought him to this point—that bad as the price of copper was at the present time in this country they had the fact that the foreign companies could not produce copper at a profit at the present time. Now there was sold by a company, he noticed, over 100,000%, worth of stuff in the last 12 months in Australia, and there was

searcely any profit whatever, and, therefore, it was impossible for the copper mines to go on at the present state, producing one at no profit, not only in this construy, but in foreign countries. With report of the profit of

(Hear, hear.) He was happy to say that within the last two days an amount of 15s. in 1l. had been announced on account of this company's claim of 635l., against the Governor and Company of Copper Miners, and ultimately the other 5s. in 1l. would be paid. Another subject he would call attention to was with regard to Boring machines. These machines had been used with great success at Carn Brea and Dolcoath, and some other mines, and the question for the directors to consider was whether the time had not arrived when directors to consider was whether the time had not arrived when they might be introduced into this mine, as they would greatly facilitate the work, and by economising labour reduce the cost. He lacilitate the work, and by economising labour reduce the cost. He believed that in a good many of the western mines the lirds had consented to contribute something towards the purchase or working of these boring machines. The directors had consulted with the Duke of Bestford's agent on the subject, and he believed the Duke had been communicated with, but so far the Duke had not consented to contribute anything, but he still hoped that the Duke would see his way to give the company a helping hand in the purchase of these machines. (Hear, hear.) Of course the cost would depend upon the number of drills; they might go to an expense of

5001., 10001., 20001., or upwards. There was no doubt those drills would be a great assistance at Richard's shaft, where instead of sinking about 8 ft. per month, they would be able to drive three or four times that rate. He might mention that since his return from the mine—about a month ago—he had spent on an average two, three, and four hours a day in the office, and it had been a serious strain upon his attention, and had he known that it would have taken up so much of his time, probably he should not have occupied his present position; but it was a pleasure to him when he saw a difficulty to try and get out of it, and he hoped the time was not far distant when all their present difficulties would be surmounted. (Hear, hear, and applause.)

CHAIRMAN, in answer to a question, said the increased cost of one six months over another might be easily explained. They might have 100% extra of timber, or 200% or 300% extra of iron, and other items of a similar kind, and the tutwork, as in the last six

months, was higher.

Capt. Isaac Richards said the expenses at Richards' shaft were put an end to, except the driving. They had to drive 50 fathoms west of the shaft.

The CHAIRMAN said that under the agreement with the Duke of Bedford there was a good deal of work to be done beyond sinking the shaft to the 300 fm. level. They had to drive east and west on te lode. They had now begun to prick into the lode at the bottom vel, and at any time might come upon a good discovery. Capt. I. RICHARDS, in answer to a question, said the ground at

Capt. I. RICHARDS, in answer to a question, said the ground at the bottom of the shaft was improving, but he could not speak of its value until the lode was cut through, which would be shortly. They wanted to prove the lode in driving.

The CHAIRMAN, in answer to a question, said they hoped to decrease more than 12 per cent. in the cost. He mentioned that the unerchants' bills and all liabilities were paid month by month. He expressed a hope that the shareholders themselves would visit the wine case to see what a large and valuable property they had. He mine, so as to see what a large and valuable property they had. He explained that the exploratory works were necessary in order to lay open the mine, and in the hope of making discoveries of ore. Capt. Isaac Richards, in answer to a question, said he could not help thinking that they would make some good discoveries in the bottom levels. Things were looking well, and they had good hunches of ore

inches of ore. Mr. DETTMAN said he had visited the mine in company with Mr. Watson, and was so satisfied with what he saw that he had since become a shareholder. (Hear, hear.) After some further discussion of an unimportant character the

report and accounts were adopted.

A cordial vote of thanks to the Chairman (Mr. Peter Watson) for his very lucid remarks, and also to the directors, closed the proceedings.

PENSTRUTHAL CONSOLS TIN AND COPPER MINING COMPANY.

The ordinary general meeting of shareholders was held at the

The ordinary general meeting of shareholders was held at the Guildhall Tavern, Gresham-street, on Wednesday,
Capt, John Walker in the chair.
The Chairman said the shareholders did him the honour to elect him as a director at the general meeting on July 17, and from that time to the present he had never ceased to exert himself body and mind in the interests of the company. Mr. Murray, himself, and the secretary went down the mine as soon as they possibly could, where they remained during a whole week, and in that time several discoveries were made. The result was communicated to the shareholders in a report early in September last.

Mr. E. Ashmead (the secretary) read the notice convening the meeting, and the minutes of the previous meeting, which were

meeting, and the minutes of the previous meeting, which were

The CHAIRMAN said he would call upon Mr. Murray to read Capt.

Polkinghorne's report, which he would probably be able to enlarge upon. He had the most perfect confidence in Mr. Murray's knowdge of the mine.
Mr. C. H. Porrs asked what had become of the amount of the

Six per Cent. bonds not stated in the accounts submitted as compared with the previous statement?

The Secretary explained that the bonds had been sold, and the

proceeds had been devoted to the purposes of the company.

Mr. Adam Murray then read the following report by Captain
Polkingherne, dated Saturday last, enlarging and commenting upon

Mr. Adam McRray then read the following report by Captain Polkingh-rne, dated Saturday last, enlarging and commenting upon geveral of the clauses contained therein.

Nic. 24.—The Highburrow shaft is slaking under the 72, by six men and three boys. Since the directors' visit in August last this shaft has been sunk 6 fathoms, for 5 fathoms of which the bide has been 6 ft. wide, composed of tin and copper rice, mundie, peach, and duor-spar-a well-defined, masterly lode for the last 6 ft. We have been passing through an elvan course, which has disordered the lode for the present; the footwall is continuing its regular course after passing through this patch of elvan, and the lode gets in more settled ground. I have every reason to believe we shall have a productive lode, seeing we had several good shoots of ore in the 58, east and west of the shaft. The 72, driving east of Highburrow shaft, by two men, in the last 6 ft. it has changed its character, and is now composed chiefly of mundie, disseminated with thin, worth about 32, per fathom. I have known appearances similar to this lead to copper ore. The 72, driving west of Highburrow shaft, by two men, has been driven during the last three months 4 fms. 3 ft., through a lode 4 ft. wide—a very promising looking lode, and from the shoot of ore seen in the 55 above, dipping east, we expect to meet with this shoot in a few fathoms further driving; worth at present for tin 32, per fathom. In the 58, west of Highburrow shaft, we have driven a cross-out south from Highburrow lode 20 fathoms, and intersected a lode 2 ft. wide; we have commenced to once sent and west on its ccurse, and it is yielding good quality copperoreand tin, worth 54, per fathom. In all probability as we leave the influence of the cross-ourse the lode will improve. In the 48, driving east and west of the cross-ourse the lode will improve. In the 48, driving east and west of the cross-ourse the lode will improve. In the 48, driving east and west of the cross-ourse the lode will improve by the content of

to keep as many men on tribute as possible.—W. POLKINGHORNE.

Mr. MUBRAY then drew attention to the fact that if there had not been a monthly expenditure of 120% in tutwork or exploration of the property the mine would have more than paid its way, for the profit on the actual working had been 60%, 70%, and 80% per month. The exploratory work was without doubt the cause of the deficiency. It was certainly not at all a bad account, when the low price of tin

as taken into consideration.

The CHAIRMAN, in reply to a question, said that when he became connected with the management of the company he found Captain Teague was receiving 20% per month for his services, an expenditure which he thought the company could not afford under the present circumstances. Everything possible had been done to cut down the expenses as much as possible. Capt. Teague had promised to do what he could to promote the interests of the company without remuneration.

Mr. Laby explained, with reference to the Victoria bonds, that when the company began to want capital the directors applie their bankers for a loan, which was obtained upon security of Victoria bonds at 3 per cent. The The bonds were afterwards sold to and the difference

presented by the item of cash at bankers.

A SHAREHOLDER asked what the items Cathedral and West

A SHAREHOLDER asked what the items Cathedral and West Jewell Mining Companies and Pascoe, Grenfell, and Co. were for? The SECRETARY replied that 2001, was due to the company by the Cathedral in respect to an over payment for an engine, 71. 10s, was the share which the West Jewell Company should bear in a dinner which was provided for the shareholders in the three companies, and the last mentioned item was for copper ore, but that had since been paid. With respect to the matter of the engine, a cheque was decrease for 4001 and resid for the angine, but in the hooks it was drawn for 400% and paid for the engine, but in the books it was charged as 200% only, but this company had never received the difference from the Cathedral Company.

Mr. TAYLOR then explained the circumstances under which the engine referred to was purchased of the Cathedral Company, stating that 2001, was for the drawing apparatus. When the engine was received at Penstruthal it required repairing, and Mr. Greene found that he had been greatly misinformed as to the value of the engine, and if he had been able he would have paid the company the 2001.

so that it should not have been the loser by the transaction. The CHAIRMAN, in raply to a question, said the late Mr. Greene

was the managing director and secretary to the company. He (the Chairmen) had examined the engine lately, and found it to be rotten and bad, and that it had been daubed over before it was sent to the Penstruthal Mine. The engine was purchased during August or September, 1876. A claim for the return of part of the money paid for this engine had been lodged in the Stannaries Court against the Cuthedral Company

Cubedral Company
A Shareholder called attention to the large amount of arrear A SHAREHOLDER called attention to the large amount of artan-of call, and the interest due upon those calls, and asked whether the company was likely to recover any part of these amounts?——The CHAIRMAN said steps were being taken to recover the amounts, and that probably part of the shares would have to be forfeited. Mr. J. J. Winser (the solicitor) said he was doing all he could to

CHAIRMAN said steps were being taken to recover the amounts, and that probably part of the shares would have to be forfeited.

Mr. J. J. Winser (the solicitor) said he was doing all he could to get the arrears in. Some had already been recovered, and others the secretary was endeavouring to get in. Though some of the amounts were not likely to be obtained the list was worth something. With respect to the 4490 shares wrongly issued by the late secretary, which was the principal matter they had to consider, unfortunately the facts were that he had issued overdrawn shares, or dumny scrip, or duplicate shares, to the number of 4490. It was only fair to say that Mr. Taylor, who was Mr. Green's principal clerk, was in no way mixed up in these fradulent transactions. In some cases shares were issued three times over, and hence the matter was an extremely difficult one to deal with. Of these shares 3935 had been registered in the books of the company, and there were 555 unregistered, but only certified, and between these two descriptions of shares an important difference had been drawn by Mr. Ingle Joyce, an eminent counsel, who had been consulted upon the matter. After giving the particulars of the issue of these shares Mr. Winser quoted Mr. Ingle Joyce's opinion, which was to the effect that a special meeting would have to be held to deal with the matter. The holders of the 3935 registered shares were not in point of law shareholders in the company, but the company would be liable to them for the value of the shares, as they were registered in the books of the company, and the company might create and issue to them mew shares out of the 4202 unissued shares still in possession of the company. To those who hold the unregistered shares it was suggested that one good share should be given for every two shares now held by them. It was a difficult question to settle, as the precise circumstances had, probably, never occurred before.

It was stated by Mr. Winsers, in reply to a question, that there were 262 shares standing

VANCOUVER COAL MINING AND LAND COMPANY.

The semi-annual general meeting of shareholders was held at the offices of the company, Cannon-street, on Tuesday,
Mr. J. Galsworthy in the chair.

Mr. J. GALSWORTHY in the chair.

Mr. SAMUEL M. ROBINS (the secretary) read the notice calling the meeting, and the report of the directors was taken as read.

The CHAIRMAN said he regretted that owing to the absence of Mr. Fitzwilliam from the same cause which had prevented his attend-Mr. Fitzwilliam from the same cause which had prevented his attendance at the previous meeting—illness—he had been requested to take the chair at that meeting. Mr. Fitzwilliam was still extremely unwell, and had been ordered to pass the winter in the South of France. The directors regretted this very much, and he was sure the shareholders would do the same. (Hear, hear.) The report presented by the directors had doubtless been read by the shareholders, who would have seen that although not one to form a subject force in the committee of the same better report than the of the same transfer o holders, who would have seen that although not one to form a subject of much congratulation, still it was a better report than that of the previous half-year, and enabled the directors to pay a dividend at the rate of 5 per cent. per annum, and to carry forward a considerable sum to the next account. They would also have seen that the sales of coal had been very considerable, the output having been rather larger than they had had hitherto, so that the company was just in the position of most large concerns of a like character, doing an enormous business at a small profit. That state of things was, he believed, too universal to require much excuse or extenuation from anyone occupying a position similar to that which he was filling. The shareholders would also have seen from the report that ing. The shareholders would also have seen from the report that the mining operations had been conducted with satisfactory results, that was to say the opening out of the new mine was progressing favourably. In the Fitzwilliam Mine they had got down to a point at which it was believed that coal could again be produced, and that this mine would turn out the success which it was anticipated it would prove. The Diamond boring had been carried on very successfully. The points he would like to say a few gods mon that this mine would turn out the success which it was anticipated it would prove. The Diamond boring had been carried on very successfully. The points he would like to say a few words upon were, he thought, very few, but he would be very happy to answer any questions which shareholders might feel disposed to put after he had finished his remarks. With regard to the cost of production which it had been intimated to the directors that they should endeavour to cut down, as he had said upon a previous occasion, that had been the great endeavour of the directors, and they had done so to a certain extent in the new mine by a new system of working. But it would not do to encounter any great trouble with the miners if it could possibly be avoided; he was not, however, prepared to say that further reductions should not be pressed for, but he thought the shareholders would do well to leave that matter in the hands of the directors and the managers at the mines, so that they might embrace the first opportunity of doing something further in that direction. The costs had been cut down considerably in comparison with the cost of working the old mine. The policy of the board was rather to work the new mine, which would be done at a less cost than working the Old Douglas or Fitzwilliam Mine, so as to compete more favourably Old Douglas or Fitzwilliam Mine, so as to compete more favourably with their neighbours in the San Francisco market. With regard to the area of coal proved in the different mines, they might safely say that at the Old Douglas Mine 150,000 tons had been proved, and at the New Douglas haif a million tons. He said this in the absence of any technical report from the manager, whose reports should be sent more frequently. With regard to Fitzwilliam, there were no data to calculate upon, but at this mine they had got below the "fault," and they had now come upon the coal, which upon a former occasion had led him into a somewhat glowing statement. With respect to the Diamond boring, the directors had had serious thoughts as to whather this operation should be continued, as it might be conwhather this operation should be continued, as it might be considered rather a luxury in these times, but when they saw what the Diamond boring had done for them he thought the shareholders would agree with the directors that it should not be discontinued would agree with the directors that it should not be discontinued. (Hear, hear.) It was costing the company 700% or 800% a year, but it had done so much good for them that he would recommend its continuance at present. (Hear, hear.) The shareholders would also, he thought, endorse the policy which the board had adopted of using the boring apparatus for the purpose of testing the fields discovered, and not in going wide afield for more coal. They had already by its use found that there is a great deal of coal underlying the company's land at various distant points, but what they now wanted was to test it more immediately in connection with the new mine More explorations should be made to prove the value of the field in More explorations should be made to prove the value of the field in the neighbourhood of the new works, so that, as they had laid out a large sum of money there, they might see that it was laid out to advantage. This was the course which the directors had determined advantage. This was the course which the directors had determined to pursue with regard to the Diamond boring machine. He might mention that the Diamond boring began on Oct. 11, 1875, and the fourth bore was completed on Sept. 29, 1877, the aggregate depth being 2300 ft., at a cost of \$4½, or about 18z, per foot. In boring by the old method the cost would have amounted to 34 per foot, and would have occupied twelve times longer, the difference being almost inches experient for the work of the cost of the inches against feet. It was quite clear that to discard the machine at present would not be judicious or politic, and the directors had determined on continuing it. No. 1 bore was commenced on Oct. 11, 1875, and at a depth of 505 ft. coal was discovered 9 ft. thick. It was some distance north of the new mine. Then No. 2 boring was Oct. 11,

commenced, and at a depth of 377 ft. they discovered $4\frac{1}{2}$ ft. of good coal. This was south of the new mine and nearest to it, and was, therefore, in a very good position. No. 3 bore was commenced about $\frac{1}{2}$ mile from No. 2, in a southerly direction, and at a depth of 295 ft. $14\frac{1}{2}$ ft. of coal was reached; and No. 4 bore, about the same distance, and a little more to the east, discovered $3\frac{1}{2}$ ft. of coal; so that the more to the east, discovered $3\frac{1}{2}$ ft. of coal is on that the property contained a very large and a little more to the east, discovered 3½ ft. of coal; so that the machine had demonstrated that the property contained a very large quantity of coal. With regard to the balance-sheet, he thought the shareholders would admit that it was a very clear statement of the position of the company. Perhaps there were one or two items they did not care about seeing there, and he had suggested that they should eliminate them by a process which he thought would meet with their approbation. The buildings (workshops, stores, and dwellings) were valued at 1510% 16s. 8d. They had written off, perhaps, a little more than was necessary here, but there were other items at not so low a figure, and they might now, he thought, slay their hand with regard to the depreciation of the first item to some extent, if not entirely, and let the depreciation go to take a way items as Park Head adit level, Lower seam exploration, and Newcastle exploration. These he would like to see out of the account; as they did not produce anything they were not, properly speaking, assets, and the same that were not of the account; as they did not produce anything they were not, properly speaking, assets, and ploration. These he would like to see out of the account; as they did not produce anything they were not, properly speaking, assets, and the sooner they were out of the accounts the better. He thought the process he had suggested would in a short time eliminate them, and that would be better than having a revaluation of the properties. With these explanations there was not, he thought, an item which could be cavilled at, indeed there were some which could reasonably be increased. There was one point he had been asked to a plain, that was the quantity of coals sold at their own wharf, and the prices they fatch as compared with those sold at Sar. plain, that was the quantity of cous soid at their own wharf, and the prices they fetch as compared with those sold at San Francisc, after deducting freight and agency. With regard to the quantity, the total sales at San Francisco for the half-year were 29,557 tms and at their wharf 2681 tons. He thought it would be very unde-

and at their wharf 2681 tons. He thought it would be very undssirable to state in public the prices received at either place. (Hex, hear.) He would then conclude by moving the adoption of the report and accounts.—Mr. JOSEPH FRY seconded the motion.

Mr. TENDRON said it seemed probable that the low price of coals would continue for some little time longer in San Francisc), but so far as could be seen under the circumstances the prices were not likely to go lower than those now ruling. Nothing had given him more satisfaction than what the Chairman had said about the bismood boring machine, and of the intention of the board to continue the policy they had hitherto adopted with regard to it. There was one paragraph in the report which stated that "the boring had been continued to a depth of 675 feet, but only thin veins of coal had been met with." This was a little disappointing, but he did not think that an argument more in favour of the continuance of the boring machine could be found than that the properties were not think that an argument more in layour of the continuance of the boring machine could be found than that the properties we subject to these fluctuations sometimes. If they had had the advantage of the boring machine when the Fitzwilliam Mine was first worked they would not have had the disappointments they had. He was very glad that the policy of continuing the exploration of the property had been decided upon. If there was anything which would give shareholders confidence during but times it was a know-leader that their property was a valuable one and that they were

would give shareholders confidence during bat times it was a know-ledge that their property was a valuable one, and that there was no fear of its being worked out. (Hear, hear.)

Capt. Pirman asked whether there would be any objection to replacing the 38% borrowed from the reserve fund to pay the last vidend. He thought they would do well to raise that fund to 400%, as it already amounted to 3796%, and they were carrying forward 1283%.—The Chairman replied that he was an advocate for improving the reserve fund, but it would, perhaps, be better to keep that question until the end of the current half-year.

The report and accounts were then unanimously adopted.

Mr. C. S. Hill moved the declaration of a dividend for the half-

Mr. C. S. HILL moved the declaration of a dividend for the half ear at the rate of 5 per cent. per annum, free of income tax.

Ir. Robinson seconded the motion, which was carried. Mr. Robinson seconded the motion, which was carried.

The proceedings terminated with a vote of thanks to the Chair.

man and directors, coupled with an expression of sympathy fort

GOLD RUN HYDRAULIC MINING COMPANY.

The ordinary meeting of shareholders was held at the offices

the company, on Thursday,—Mr. HILL in the chair.

The Secretarr read the notice convening the meeting.

The CHAIRMAN said—Before asking the shareholders to pass it accounts I should like to say a few words upon the position of it company, and also to make some few observations on the account themselves. At the last meeting you were informed by Mr. Si in his report that he was engaged in doing some dead work ne in his report that he was engaged in doing some dead work necessary for preparing the washing at the mine, and he was engaged making some new inclines, in consequence of the old incline becoming at times stopped up. Since the last meeting that has been ompleted, and during the past year washing has progressed regularly. The water season, as many of you are aware, was an unusually short one. It commenced very late, and ended very early. Instead of commencing washing about the end of December, it did not commence till the last day of January. During the time we had water we were enabled to make four runs. These runs, although not shown by the report, produced a clear profit on the working, amounting, as near as possible, to \$4300. Of course, as the shareholder were aware, in commencing to open the mine great difficulties were experienced, so that the fabulous statements in the time of Red could not be considered as the regular runs, if I may use the term. The runs were of various numbers of days, some longer and some could not be considered as the regular runs, if I may use the tem. The runs were of various numbers of days, some longer and sentents. The first run was of 31 days, and the net profit deried \$965. The second run was 33½ days, and the profit of \$1256; and the third run was 27 days, and produced a net profit of \$1256; and the last run, which is the shortest, and ended on June 21, was for 19 days, and produced a clear profit of \$968. Had the runs been more frequent and of longer duration, naturally we should have made a greater profit than we have. However, as Mr. Stone said it would take two years to open out the mine, I think we ought to be fairly satisfied with the result of the year before he promised us dividends During the past autumn I am happy to say we have not had very much dead work to do. The mine had been opened out to acetain extent during the course of the summer by washing, and work that has been done during the autumn has been only such as was need. has been done during the autumn has been only such as was needs any to put the mine in a condition to wash for the year 15th From Mr. Stone's report you will see the nature of the work helds been engaged upon—raising the incline to the surface of the pre-From Mr. Stone's report you will see the nature of the work heb been engaged upon—raising the incline to the surface of the pies not level, having a new string of pipes laid down (which I belie is now completed), and he has been altering his boxes in the tunnel and his unicurents. I may say that one disadvantage he has been under has been outer has been under has been outer has been outer has been outer has been under has been has been under has been had been had been had bee

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olders to a mistake that has been discovered since the accounts were printed, olders to a mistake that has been discovered since the accounts were printed, ref. I am happy to say that it is a mistake on the right side. Our ilabilities to be reduced by 1298f, 3s. 5d. This was an error that occurred in auditing, a Ibelieve, a clerical error that escaped attention at the time; however, as Leke is on the right side, I would suggest that when the report of the disternment of the disternment of the disternment of the disternment of the working expenses of this year. I stated that the profit of the first of the working expenses of this year. I stated that the profit of the side was 33000. This sum the shareholters might object is not shown in the state of the late out. I do not think the balance-sheet solid to be mixed up way. I think for the future we ought to have a separate profit and loss them the discounts are made up they will be made up in the form I be mext time the accounts are made up they will be made up in the form I be accounts of the directors that that should be so. I have, I think, and that the accounts be adopted, and that the accounts adopted, and that the accounts adopted as mended.—Mr. J. Lord and the the distinction.

Exist time the accounts are made up they will be made up in the form I It is the wish of the directors that that should be so. I have, think, observations to make, and I will now move that the report of the directopted, and that the accounts be adopted as amended.—Mr. J. Lord the motion.

128 HLL said that at the former meeting there had been some talk ill. He wished to know if anything had been done in respect to that The CHAIRMAN said nothing had been done with regard to the mill That would require the expenditure of a little money. JUNESHOULD AND THE SAID HERS said he believed, from the position the company now occur for this year they would make a very large amount of money in coming what they made last year, principally by the reduction of the costs, had arranged with the superintendents of other large properties there the price of labour from \$3 to about \$2.13 per day, and that reduction pay of twelve men would represent a difference of nearly \$10 per day. elucion would be in the cost of water. The company had been paying sinch, and they had run 500 inches during the past year. They now so run 1000 inches—as they had a new rig of double the capacity of that year—and they would get the water at a reduction of 2 cents an inch, ald upon one run—amount to a saving of \$2000. There was a further in the salary of their superintendent. Mr. Stone having taken the su more of the Cedar Creek Mine, the salary was to be divided between the mice, and this company, instead of paying \$2000 a year, would only \$1200, the reduction being a gain of \$800 a year to this company, and the represented a saving of about \$1000 on each run, and then the between 500 and 1000 inches of water would be a great benefit to the anice, and this company, instead of paying \$2000 a year, would only \$1200, the reduction being a gain of \$800 a year to this company, and the representation of \$1000 on each run, and then the between 500 and 1000 inches of water to would be a great benefit to the anice, and the found the property in splendii conditi

ENGLISH AUSTRALIAN GOLD MINING COMPANY.

ENGLISH AUSTRALIAN GOLD MINING COMPANY.

In ordinary meeting of the shareholders was held at the offices file company, Austinfriars, yesterday,

Mr. E. W. WINGROVE in the chair.

YI. SMITH (the secretary) read the notice convening the meeting. The CHAIRMAN said: Well, gentleman, this is the meeting which, yact of Parliament, every company is now bound to hold within an months of the date of its incorporation; and this company and by registere I on Aug. 8 last, applications having been received mearly 6000 shares, although we had only 5000 to allot. The tall number—5000—were alloted on Aug. 9. At the time we made is allotment some doubt arose in the minds of some of the letter whether it would not have been better to have increased the number of the letter whether it would not have been better to have increased the number of the letter whether it would not have been better to have increased the number of the letter whether it would not have been better to have increased the number of the letter whether it would not have been better to have increased the number of the letter whether it would not have been better to have increased the number of the letter whether it would not have been better to have increased the number of the letter whether it would not have been better to have increased the number of the letter whether it would not have been better to have increased the sum of the letter of the all letter to have increased the sum of the letter whether letter whether the letter whether lette

DER asked what number of months the manager expected to be executed upon which he was now engaged.

As said if he was going to spend \$390. a month ten months would end of his resources, but it was hoped and believed that the work ed long before that time. With respect to the value of the mine, of Clunes, had offered to take the mine and spend 40000. upon it, mpany a small royalty on the ore raised. He (the Chairman) offer as a proof that, at any rate, Captain Lewis had a practical se matter, and that had encouraged the directors very much in the emselves had formed of the property. The debts of the old compute to 1900. I had now all been settled and paid off; and this comits and available capital of \$4000. of which 1850. had been transing, leaving 1750. In hand, which it was believed would be ample necess of the company. He trusted those shareholders who had heir shares would now do so.

Ongs then terminated.

ngs then terminated.

ANT.—At an extraordinary general meeting of shareholders, on C. S. Hill in the chair), it was resolved to sanction the acts of ill and G. F. Smith to the same extent as those of Mr. W. S. Crowe, acce, would have been sanctioned. The directors were requested retailers 300 shares at 15s, per share, payable by three instalments of three months, or, failing the issue of these, to offer, under the rand June, 1874, mort rage debeature honds to meet present finants. A general meeting will be held in three weeks.

CE MINES,—At the meeting, on Wednesday Mr. R. H. Bamfield.

Coments. A general meeting will be held in three weeks.
DENCE MINES.—At the meeting, on Wednesday (Mr. R. H. Bamfield hir), the accounts showed a debit balance of 1187. 4s. 7d. It was not lead peec edings be at once taken to recover arrears of calls. Capt. all Roberts reported that all underground operations had ceased, but two pitches are being worked at 13s. 4d. in 1l. The plant will shortly be define.

For remainder of Meetings see to-day's Supplement.]

TH MOLTON CONSOLS.—This mine is drained 3 fms. below 12 fm. level, and that level has been cleared and secured to 13 or 4 fms. from the end. In the back of the 12 there is a worked by the former parties, and in which a lode is now ling that will produce 1½ ton of silver-lead per fathom. The Ing that will produce 1½ ton of silver-lead per fathom. The most fite level just under this stope has been cleared up 3 fms., for this distance there is a lode that will yield fully 2 tons of its per fathom, and the agents think that the run of lead ground at this said be found much longer when the level is further cleared. There is a said in the bottom of the level, by the slide of this run of lead ground, by it mer workers, whose object evidently was to communicate to the 22, and slope away the ore, as no ore ground whatever has been taken away below. The mine will be drained to the 22 in a few days, when a rise will be put in that level to meet the 12 winze, and the agents are of opinion that when done a fine run of ore ground will be available for stoping. In a few days if m, level will be cleared and secured to the end, at which point it is said

there is also a good lode standing. The appearances of the mine exceed thus far all expectation; and, if its further development prove equally satisfactory, it will undoubtedly prove a great success, and be the means of directing public attention to the hitherto neglected mineral districts of North Devon. The mine was worked many years ago by a party of Cornish adventurers, who raised considerable quantities of lead from it. The ore, however, was found close upon the boundary of the sett; and, as the proprietor of the adjoining ground refused to grant it, there was no alternative but to stop the mine with a fine discovery of lead in sight. The present proprietors have a grant of the adjoining ground, with a run of about three-quarters of a mile on the course of the lode.

The following special report has been made for the directors:—

Boatddu, Nov 21.—On my arrival at the mine last lune, with the consent of the ord, the deeper workings of the mine were stopped because the increase of water the bottom of the engine-shaft would necessitate an increase of cost for the riving east of the deep level, which it would be better to avoid until the stope in 0. 7 winze had proved whether the chimney of rich ore was holding down in epth.

board, the deeper workings of the mine were stopped because the increase of water at the bottom of the engine-shaft would necessitate an increase of cost for the driving east of the deep level, which it would be better to avoid until the stope in No. I winze had proved whether the chimney of rich ore was holding down in Grown of the provent of the control of the main and branch lodes at the top of No. I.

If No. 7 so far the ground has shown the most favourable appearances for gold, and there is no doubt we are on the shoot of visible gold which forms at the junction of the main and branch lodes at the top of No. I.

From the branch lode we have continued to obtain visible gold since it was first opened upon in Jane. On this lode from No. I a level has been began at some past time, but was not driven sufficiently far to prove anything. If this were now pursued a good piece of stoping ground would be opened out, and the sides of the lode might be kept secure by leaving the more worthless portion of the vein to form an arch.

In No. 4 a stops which was to hole through to No. 7 was stopped for the same reason that the deep level was not continued, and also because by not cutting through to No. 7 the saving of the cast of unwatering the mine could be effected since then, inding that the water was rising but slowly after attaining a certain height, a party were put in for a few days to try some ground between the old incline and a stope, in bott of which places gold had been cut, but, though in height, a party were put in for a few days to try some ground between the old incline and a stope, in bott of which places gold had been cut, but, tough in the gold which we followed notice of the stop of the standance of the stop of the standance of the stan

e struck. ost of exploring this part of the lode would be but slight compared with underground—3: per fathom should thoroughly test the 300 fms. of lode The cost of exporing this part of the lode would be but signt compared with driving underground -3. per fathom should thoroughly test the 300 fms. of lode now shown to exist.

From the above I would suggest that the work to be continued should be—
1.—The stopes on the branch lode and No 7.
2.—The driving of a level on the branch lode from No. 1.
3.—The driving of the 5 fm. level west.
4.—The thorough exploration of the lode west of the engine-shaft, together with its branch lodes.—W. B. DAVIES.

4.—The thorough exploration of the lode west of the engine-shaft, together with its branch lodes.—W. B. DAYES.

FOREIGN MINES.

ST. JOHN DEL REY.—Telegram from Morro Velho, dated Rio de Janeiro, Nov. 23: Profit for the month of October, 5800. Cost 590. above average. All going on well room and the profit of the control of the control of November, 1,500 oits.—8008.; iyied, 73 oits per ton. — Telegram from Morro Velho, dated Rio de Janeiro, Nov. 29: Produce eleven DNN PEDRO.—Telegram from Mines deal Nov. 23: Produce eleven deal of November, 1,650 oits.—Related Nov. 23: Produce eleven deal of November, 1,650 oits.—Related Nov. 23: Produce eleven deal of November, 1,650 oits.—Related Nov. 23: Produce eleven deal of November, 1,650 oits.—Related Nov. 23: Produce eleven deal of November, 1,650 oits.

RICIMOND CONSOLIDATED.—Telegram from the mine at Eureka, Nevada Weeks and 850.00 from 100 or of three furnaces). Week's produce of —R. Rickard, Nov. 7: Since my last the 200 level has been drifted 30 fr. on the course of the ore; all the distance has been productive. The width of the drift of 16, and of good quality: when the course of the ore; all the distance has been productive. The width of the drift of 16, and of good quality: when the quartities at present the contract at close with no ore. The 600 level on the quartitie, and the quartities of the particles of the quartities of the particles of the quartities of the particles of the particles of the particles of the quartities of the particles of t

couraging for some new and better development.—Old Ore Chamber: Still taking out also as per week, working 12 men.

The course of the per week, working 12 men.

Mr. Danne the eight stipment of taillon, which makes a gross extrained. Staged on the per still taking of the per still taking of the per still taking of the per still the per still taking of the per still taking the per still taking of the per still taking taking it be the title per still taking taking it be still taking the per still taking taking the still taking taking the still taking taking the still taking tak

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—The directors of this company have the satisfaction to report Sin.—The directors of this company have the satisfaction to report that their superintendent advices, under date Oct. 16, that on the 11th of that month the line was opened from end to end, an engine and 10 wagons having gone up from Tucacas to the terminus at Aroa for the first time. The whole line is now being worked by the company under arrangement with the contractors until definitely taken Traffic has been continued without interruption report, and very general preparations are stated to be in progress throughout the districts in the interior for bringing coffee and other produce of the coming season for transport by the railway.

New Broad-street, Nov. 30.

ROBERT B. THOMSON, Sec.

The Share Investment Trust report for the half-year ended Sept. 15 states that the revenue was 13,587/., including one or two small items brought down. The expenses were 1288/. 218/. is to be placed to sinking fund account, and 10,684/. is set aside to meet the payments of 1/. each on the coupons of September, 1878, and March. This leaves 1598/. to be carried to the new account.

The creditors of the Industrial Coal and Iron Company are to send

in their claims by Dec. 31.

in their claims by Dec. 31.

Epps's Cocoa—Grateful and Comforting,—" By a thorough knowledge of the natural laws which govern the operations of digestion and nutrition, and by a careful application of the fine properties of well-selected cocoa, Mr. Epps has provided our breakfast tables with a delie tely flavoured beverage which may save us many heavy doctors' bills. It is by the judicious use of such articles of diet that a constitution may be gradually built up until strong enough to resist every tendency to disease. Hundreds of subtle maladies are floating around us ready to attack wherever there is a weak point. We may escape many a futal shaft by keeping ourselves well fortified with pure blood and a properly nourished frame. —Civil Service Gractic. Sold only in packets labelled "James Epps and Co.," Homocopathic Chemists, London,"

WATSON BROTHERS' MINING CIRCULAR.

Ten years ago the weekly information which had previously been published for a great number of years in Warson Brothers. Mining Circular was transferred to the columns of the Mining Journal, with he following announcement; which is now reproduced in consequence of the numerous letters and enquiries handed to them of late in reply to one which appeared in the Journal on the Clementina Mine.

The great extension of mining business, the difficulty so often complained of The great extension or mining ousniess, the uniterity as a contract of the product of the product of the product of the product of the state of Cornish and Foreign Mines, and of the financial and real position of mining companies generally, have induced Mesers, Warson Brothers to make their Circular now published in the Mining Journal more extensively known, and

That they issue daily to clients and others who apply for it a Price List (as supplied to most of the London and country papers), giving the closing prices of Mining Shares up to Four o'clock.

They also buy and sell shares for immediate cash or for the usual fornightly settlement in all Mines dealt in on the Mining and Stock Exchanges, at the close market prices of the day, free of all charges for commission. They deal also, on the same terms, in the Public Funds, Railways, Telegraphs, and all other Securities dealt in upon the Stock Exchange, Having agents in all the mining districts, they are constantly getting mines inspected for their own guidance, and will also obtain special reports of any particular mine for their clients, for the inspecting agent's fee of £2 2s.

In the year 1843, when mining was almost unknown to the general In the year 1845, when mining was almost unknown to the general public attention was first called to its advantages, when properly conducted, in the "Compendium of British Mining," commenced in 1837, and published in 1843, by Mr. WATSON, F.G.S., author of "Gleanings among Mines and Miners," "Records of Ancient Mining," "Cornish Notes" (first series, 1882), "Cornish Notes" (second series, 1883), "The Progress of Mining," with Statistics of the Mining Interest, annually for 21 years, &c., &c. In the Compendium, published in 1843, Mr. WATSON was the first to recommend the system of a "division of small risks in several mines, ensuring the success in the aggregate," and Messrs. WATSON BROTHERS have always a selected list on hand. Perhaps at no former period in the annals of mining has there been more peculiar need of honest and experienced advice in regard to mines and sharedealing than there is at present; and from the lengthened experience of Messrs. WATSON BROTHERS they are emboldened to offer, thus publicly, their best services and advice to all connected with notines and mining.

with relies and mining. Messrs. WATSON BROTHERS are daily asked their opinion of particular innes, as well as to recommend mines to invest or speculate in, and they give heir advice and recommend mines to the best of their judgment and ability, ounded on the best practical advice they can obtain from the mining districts, at they will not be held responsible, nor subject to blame, if results do not ways equal the expectations they may have held out in a property so fluctuating a window.

WATSON BROTHERS, MINEOWNERS, STOCK AND SHARE DEALERS, &c., 1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

UNLIMITED COMPANIES .- As we notice in the list of new com UNLIMITED COMPANIES.—As we notice in the list of new companies registered a project which does not have attached to its title the significant word "limited," it may be useful to describe the exact position of these who are interested as shareholders in a company of this kind. In an unlimited company the members are liable to the last farthing for the whole debt- of the concern. True, the comthe last farthing for the whole debt- of the concern. True, the company being a corporation individual members cannot be sued, but by reason of the liability of the members themselves to pay calls to an unlimited extent, each contributer is compelled to contribute so long and so often as calls are made, and his liability only ends really with the satisfaction of the claim or claims. Under these circum stances unlimited companies are seldom registered, a fact which can searcely be wondered at.

stances unlimited companies are seldom registered, a fact which can searcely be wondered at.

LEAPHLLS.—We are assured there is no cause for alarm here, owing to the fall in lead. The mine returns about 250 tons of ore per month, and it is smelted on the mine into pig-lead, which has we understand, fall-n about 11, per ton. Last year the profits were about 13,000%, and if the mine is working at the same rate now a fall of 1% per ton on 200 tons of pig lead per month would only make that amount of profit less by 2400%. And let us hope lead will rise ratio before long.

that amount of profit less by 2400%. And let us nope lead will rise regain before long.

D'ERESBY MOUNTAIN.—The Gors lode continues worth 3 tons of letd ore per fathom. The agent thinks this will continue down to the next level (No. 5 adit), which will be proved as soon as possible, and will be, as we have said before, a most important point. In No. 3 adit the lode in the level approaching the rich winze is now. 2 ft. wide, and well defined, and this may shortly result in another good discovery. Applications for shares have been made from all quarters, but from the small number, and the fact that most of them are in the hands of private parties, who are content to hold and see the result of No.5 adit, which may double the highest value yet put upon them; the price is matter of negociation, and we cannot give

close quotation. CLEMENTINA, which D'Eresby has thrown into the shade of late,

CLEMENTINA, which D'Eresby has thrown into the shade of late, is looking better, and we soon expect to hear of a good improvement in the 34, or buttom level.

GREAT LAXEY ore is rich for silver, and is, therefore, not so much affected by the fell in lead.

BANTRY BAY BARYTES.—We are the largest shareholders here, but have never leen in the direction. Close upon 7000 tons of barytes have been raised and sold, but without capital it is useless going on; and the best plan, as it seems to us, is for the directorate wind up, and, if possible, form a new company with the requisite capital; and then each shareholder in the present might be offered an interest in the new company, free from the difficulties of the old.

site capital; and then each shareholder in the paradox interest in the new company, free from the difficulties of the old.

Saturday, Noy, 24. — Market for the shared call at a reduction. Carn Brea. 47. to 5 : Delocath, 35 to 35; South Condurrow, 9 to 94; Timeroft, 16 to 18; West Frances, 5 to 54; Wieal Agar, 4 to 44; Grenville, 5 to 33; Bouth Frances, 35; to 4; Rookhope Lead, 24s. to 28s, and hern; Van. 31 to 33; Roman Gravels. 35; to 4; Rookhope Lead, 24s. to 28s, and hern; Van. 31 to 33; Roman Gravels. 35; to 4; Rookhope Lead, 24s. to 28s, and hern; Van. 31 to 33; Roman Gravels. Not 16 s.; Tankerville, 44; to 16; Leadhills, 44; to 8; Great Laxey, 21 to 22; Morth Laxes, 8s to 16s.; Pateley Bridge, 34; to 44.

Monday, Nov. 28.—Market very quiet, and prices almostnominal. Carn Brea. 47½ to 30; Delocath, 35 to 31; East Van., 3s to 43; Glenroy, 15s. to 20s.; Great Laxey, 21 to 22; Leadhills, 44; to 5; North Laxey, 8s. to 10 s.; Parys Mountain, 10s. to 12s.; Roman Grav-ls, 73; to 83; Rookhope, 24s. to 25s.; South Condurrow, 9 to 94; Suth Frances, 31; to 4; Tankerville, 5 to 54; Thoroft, 16 to 17; Van., 31 to 33; West Chiverton, 3 to 14; West Frances, 5 to 5; West Pateley Bridge, 115; to 22; Wheal Agar, 4 to 44; Grauville, 3 to 34; West Wye Valley, 2 to 23; Richmond, 84; to 9; Eberhardt, 63; to 63d. Webnishay, Nov. 28.—Market for the shares flat, and prices are again lower. Carn Brea, 44 to 44; to 5 locath, 33 to 35; Susth Condurrow, 9 to 94; Timcroft, 14 to 16; West Frances, 4 to 44; Grenville, 24; to 3; Rookhope Lead, 28s. to 12s.; Emerhardt, 64; to 7; Kalmond, 84; to 5; Van. 31 to 33; Great Laxey, 10 to 22; West Chiverton, 13 to 14; North Luxey, 8s. to 10s.; Parys Mountain, 10s. to 12s.; Emerhardt, 64; to 7; Kalmond, 84; to 9.

Thusbay, Nov. 29.—There is very little doing to-day, the dealers being buy with the settlement. Tin shares continue very quiet. The following in most cases are nominal quotations for the day:—Carn Brea, 44 to 46; Decom, 35; Tolocath, 33 to 35; East Van. 34; to 4; Glenroy-15 to 29; Great L

et very active for tin shares, at advanced prices, did to Tid; Chontales, 11s. to 13s.

ENGLI-II MINING COMPANIES IN THE UNITED STATES.—We are glad to see that Mr. Hinry Sewell, M.E., from London, is actively at work (as he has been for many years), helping to pull through some of the many mismanaged English mining companies in this county. We understand that he has already come to terms with the creditors of the Exchequer and IXL. Mining Companies of London, in Alpine county, and that by these settler ent-he has been able to save his companies \$45,000. They are anxiously expecting his report in London, as will appear by the following extract from the Money Article of the London Mining Journal of Oct. 6: "Exchequer. § to §; the manager has succeed d in getting a few men to the Money Article of the Lindon Mining Journal of Oct. of Ex-chequer & to \$\frac{3}{2}\$; the manager has succeed d in getting a few men to clear the caved places, so that Mr. Henry Sewell may have access to every part of the none for a thorough examination, more particularly the last discoveries to the 400 ft, level. That work is not yet completed. Many of the shareholders are looking forward with considerable anxiety for Mr. Sewell's report, which, it is hoped, will have the effect of improving the position of shares in the market." — San Francisco News Letter, New. 3.

Vice Chancellor Ha I has appointed Mr. Alfred A. Broad (Broads, Paterson, and May) provisional official liquidator of James Anderson and Co., in conjunction with one of the directors.

Mining Correspondence.

BRITISH MINES.

BRITISH MINES.

ABERDAUNANT.—S. Toy, Nov. 29: The cross cut at the 15 is driven north 8 ft. We have about 6 fms. more to drive in this direction to intersect the lode, which will take us shout two months from this time. The men are working well, we will say that two months from this time. The men are working well, as SSHEION.—J. Cr.zw., J. Manley, Nov. 29: There is no change in the 60, east of boundary, the lode still continues large, and lets out a great quantity of water. The lode in the 59, east of boundary, is worth 1 ton of lead per fathour; a very promising end. No other change throughout the mine. We have shipped the parcel of lead (30 tons) for Weston, Son, and Co., and have sent out samples for the sale of another parcel of 30 tons to-morrow; we also hope to sample a parcel of lead (30 tons) for Weston, Son, and Co., and have sent out samples for the sale of another parcel of 30 tons to-morrow; we also hope to sample a parcel of lead (30 tons) for Weston, Son, and Co., and have sent out samples for out his lode for the past week I see nothing that I can report on more than I have previously done. Owing to the very heavy rain of late we can do no more on this lode through the indux of water; the same remark may be applied to shoding operations.—North and Sonth Lode: In driving the adit level on the course of this lode into the south hill the lode presents a cheering appearance, still condining the whole width of the level, and yielding some saving work. For the control of the valley yield good saving work. For the control of the valley yield good saving work. For the control of the valley yield good saving work. For the control of the valley yield good saving work. For the control of the valley yield good saving work. For the control of the valley yield good saving work. For the control of the valley yield good saving work. For the part of the part o

at the 34 has very much improved since yesterday; it is now producing some nice lead work

COMBMARTIN.—T. Comer, Nov. 22: We have cleared the 15, cast of cross-cet, 15fms, where we find the lode 4ft. while, 'composed of caple, quartz, with a little lead and blende. The lode in the 28-cast is without alteration. The lode in the 28-cast is a shaft on No. 2 lode in the weetern ground. The lode is of a very promising character, yielding some fine spots of lead or one.

— T. Comer, Nov. 39. The lode in the 15, driving east of Harrie's shaft, is 4 ft. wide, pro luting good stones of lead and blende. The lode in the 28-cast is without change. Ear progress is being made in sinking on No 2 lode in the weetern ground, which is very promising, and, from present appearances, we expect a good pole as we get at a deeper point.

COURT GRANGE.—James G Green, Nov. 23: Sstting Report—Engine-Shaft: The man will complete their bargin, cutting lodes, sinking 5 ft., laving cistern, &c., preparatory to regular sinking in the course of three weeks from to day. The 35-ce that man will complete their bargin, cutting lodes, sinking 5 ft. a special control of the complete their bargin, cutting lodes, sinking 5 ft. a progress of the sevence of the progress of the progress of the progress of the special control of the 15 control of the 1 one in the first same level, east or cross out, to two men, at his, per fathom; the lode is very hard, worth 8t, per fathom. To drive the 3e east to four men, at 13°s, per fathom—producing occasional stones of lead, with very favou able indications for an early improvement. The 14 to drive east, to four men, at 180s, per fathom; the lode is very large and vushy, worth at present 20th per fathom for each —a promising end, producing beautiful specimens of crystalised carbonate of each. To clear and timber through shallowadit, to four men, at 50s, per fathom; this level will be completed throughout in the course of two morbis, when the men will be removed to clear one of the bottom levels.—Francis' Shaft: To fix skipway complete from surface, to four men, for the sum of 14'; when this work has been accomplished we shall be in a position to commence sinking with a full pare of men. I intend in a few days to commence sinking with a full pare of men. I intend in a few days to commence sinking with a full pare of men. I intend in a few days to commence sinking with a full pare of men. I intend in a few days to commence sinking with a view to opening up and proving one ground recently driven through in that ewel —Surface Works: Every effort is being made to push this department forward, but the weather being rough and wet progress is slow and difficult. The same remark applies to the reservoir embankment. In conclusion, I have pleasure in stating that the mine is opening up very satisfactorily, and warrants the nest vigorous exploratory work.

bout 4 fms, below the 19, and go ... on where the dip of bead is. The dresser is going on with all speed to get another order of 's ad into the market.

DERESHY MOUNTAIN.—John Roberts, William Bennetts, Nov. 28; The dele here is very much improved during the past month; it is now 2 ft, wide, real delined, and has a very coronising appearance for future improvement. This end is now getting near the winze in he bostom of the No. 2, and speaks vell for the trath of the reports relating to it.—No. 4 Addi, Gorse Lode: The tope here is quite as good as formerly reported. The whole width of the lode is overh 3 tons of lead per fathom. These has been a level driven by the heading if this lode which we are now clearing. We have been informed that this has een driven a great way into the mountain, and through good branches of lead, but we cannot yet verify this. Should we find it to be correct this will also increase the Hafna tole nearly 109 fathoms further up the mountain than we have yet seen it at this depth, for this reason for the time being we have put the near of the Hafna lode to clear this. We are of opinion that we shall have a tope of the same character as that now in the roof from this I-val down to the No. 5 adit, which will be cleared as soon as possible. We have growing confidence a the good future of this mine.

Describer: Jeffrie's Staft, Middle Vein: The 95, 55 fms. east of shaft, is by the clide of the vein; in the best of this level No. 1 stops is 5 ft. wide, and worth 15 cours. of ore per farhour: No. 2 is 8 ft. wide, and worth 15 cours. of ore per farhour: No. 3 is 10 ft. wide, and worth 15 cours. of ore per farhour: and No. 5 is 4 ft. wide, and worth 21 cuts. of ore per farhour: and No. 5 is 4 ft. wide, and produces 11 cuts. of ore per farhour. The stage in the farm and No. 5 is 4 ft. wide, and produces 2 ft. wide, and ground in the stage and the 95, opposite shaft, is now across 36 fms. 10 in.; no change in the ground. The 95, 126 fms. west of shaft, is easier to drive; vein 2 ft. wide, and ground in the 14s east since our last. The ground in the 14s cuts at since our last. The ground in the 14s cut since our last. The ground in the 14s cut since our last. The ground in the 14s cut since our last. The ground in the 14s cut since our last. The ground is changed in the person of the last of shaft, is easier to drive; vein 2 ft. wide, and ground in the 14s cut since our last. The ground is changed in the 15s one of ore per fathour. The 15s in the 15s cut since our last. The ground is changed in the 15s cut since our last. The ground is changed in the 15s cut since our last. The ground is changed in the 15s cut since our last of ore per fathour. The 15s in the 25s cuts of ore per fathour respectively; average width of vein; the saving work for one per fathour. The 15s cuts of ore per fathour, and the cut of the saving work for oper fathour. The 25s cuts, of ore per fathour, and the vein is the 15s cut side of the level west from sump, under the 75s cuts, of ore per fathour. The 15s cuts of ore per fathour, and the vein is the 15s cuts and 15s cuts of ore per fathour. The 25s cuts of ore per fathour, and the vein is the 15s cuts of ore per fathour. The 1

150 fm. level 2 fms. stent, by nine men, at 14/.; it was driven 2 fms. 3 ft.—the ground continues favourable for progress. We have intersected another brane ore. To drive west in the 130 on south part of Child's 1 fm. stent, by four men, at 30 in. wide underlying north, composed chiefly of quartz, intermixed with spot of control. The was driven 1 fm. 3 ft.—to 6 in. wide, chiefly peach, and in Lavoursh, men, at 32; it measured 5 fms. 0 ft. 4 in., yielding 1 y ton 0 one per fathom. To stope Child's lode in the back of the 80 fm. level 5 fms. stent, by four men, at 32; the south lode in the back of the 80 fm. level 5 fms. stent, by four men, at 32; the south lode in the back of the 70 fm. level 3 fms. stent, by four men, at 32; the south lode in the back of the 70 fm. level 3 fms. stent, by four men, at 32; the south lode in the back of the 70 fm. level 3 fms. stent, by four men, at 32; the pitches, each by two men, working at a tribute of 18s, in 1/.

EAST VAN.—W. Williams, Nov. 20; Tempest shaft is sunk 6 fms. below the 6.

There is no change to report upon the other two points this week.

EAST WHEAL LOVELL.—Bichard Quentrall, Nov. 28; There is no alternise in the 100 we-to-80 east since my last report. We are stoping the back of the 10s, west, where the lode is worth 6/1, per fathom. We are making very good progres in the back of the 10s, east of engine shaft, is 8 fr. wide, worth 30 per mundic, and good quality copper ore, with an increase of water coming throat the stopes in the back of the 10s, east of engine shaft, is 8 fr. wide, worth 30 per mundic, and good quality copper ore, with an increase of water coming throat the rost, with every indication of being near the lode; in consequence of the sith ends of the ground our progress is slow. There is not much change in our risks pitches during the past week. We are basily engaged in this very inclement was there wish a limited number of hands in preparing for our next sampling, which we calculate will be over 100 tons of copper ore.

GLASGOW CARADON CONSOLS.—

cross-cut I am glad to say that water is issuing freely from the forebrast; the ground is very much distincted, and every appearance that we are close to the look. We have made great progress in getting the new engine up, and everyfing is not excelling satisfactority.

GREAT DYLIFFE.—Evan Evans, Nov. 28; At the 95, east of Dyliffe lode, we are stripping the lode for 7 fms. in length, worth about 15 cwts, per fathom so it as it is stripped; we expect it butter in a few days. We shall have much grown to stope in this place for six months. In the stopes over the 132 cast and set there was not much done for some time, owing to the breakage of the where the their grown of the ment of the winze on the new lode we have good ore now for about 3 fms, and looking set to day in the loctom again. We feel more confident every week that this lotest to day in the loctom again. We feel more confident every week that this lotest prove a rich one in depth. Our stopes on the Ledense did lode are mentas used. Under the 95, east of Braifford shaft, we are driving east in search of the ore is going down at this point or not we shall be about know yet whether this ore is going down at this point or not we shall be also know yet whether this ore is going down at this point or not we shall be also say more in a week or two.

GREAT HOLWAY.—Nov. 29; We shall start the level engine in a few day We have purchased an engine with pumps and every requisite for Roskells shaft, which we purpose carrying down to the 130 yard level. This will give a shaft which we purpose carrying down to the 130 yard level. This will give a shaft which we purpose carrying down to the 130 yard level. This will give a shaft of the shaft, and are gesting some good leaf ore.

GREAT LAXEY.—F. Reddeleffe, Nov. 21; The ground in the 235 south of engine-shaft is much easier for driving than it has been for some time in a few day we eagerly look for a lode of value; but as yet it only produces a little ore one should be a shaft and are gesting some good leaf ore.

GREAT

aturday, which is our monthly setting-day. The machinery is in good worder, GNOSTON CONSOLS—J. Chynoweth, Nov. 29: The lode at the 40, we gine-shaft, is very large and masterly and spare for progress, issuing out rearms of water from the north sails; it is composed of capital stones of lead indee, quartz, &c.; a very promising lode. In the 30 west of No. 4 wings at leading the progress of the dead of the control of the con

put right.
LLAN GAN.-Capt. Wasley, Nov. 28: Ott Engine-Shaft: The stor

DEC. 15 ton of ord ducing good here is no c MEW TY

1877

If too of ore per fathom. The lode in the 60, cast of shaft, is 2ft. wide, and pro-fided good stones of ore; there are now about 4 fms, further to drive to commu-

to of ore per fathom. The lode in the 60, east of shaft, is 21t. wide, and proing good stones of ore; there are now about 4 fms. further to drive to commuing good stones of ore; there are now about 4 fms. further to drive to commuing good stones of ore; there are now about 4 fms. further to drive to commuing good stones of the stone of the stone of the community of the constant of the community of the c

me spots very good, not so good as the week details at the present time; there is some prospect of its improving yet; the staff at the present time; earth saving.

Title is some prospect of its improving yet; the staff at the present time; earth saving.

BETH CORNWALL.—T. Doidge, Nov. 28: The lode in the north adit is the same as when I last advised you. The branch of mundle in the bottom earl is about 10 in. big, the whole lode being about 2½ ft. wide, and progreg do stones of lead. We have started to clear out the south adit. When we shall put out a cross-cost level to the western lode, which I hope to cut in sea shall put out a cross-cost level to the western lode, which I hope to cut in sea shall put out a cross-cost level to the western lode, which I hope to cut in size in the south end it is about 1 ft. wide, yielding good stones and letting out a heavy feed of water. In the north end the iode is 3 feet, and letting out a heavy feed of water. In the north end the iode is 3 feet, and letting out a heavy feed of water. In the north end the iode is of the south end in the south end is south 1 to not per fathom. The stope in the roof of the 50 is worth 1 to per fathom, and the roof stope 15 cets, per fm. stope in the roof of the 50 is worth 10 cets, per fathom, and the 40 end stope in the roof of the 50 is worth 10 cets, per fathom, and the 40 end the whate completed the cutting down of Doctor's engine shaft above the weak water completed the cutting down of Doctor's engine shaft above the second seco

in the 1001 of the of B warm a cover, per cover in the 1001 of the of B s. to 10 cwts, per fathom.

TRESKERBY.—J. Nancarrow, A. Nancarrow, Nov. 27: In the past have completed the cutting down of Doctor's engine shaft above the n casing and dividing, and set it in order for drawing from the adit 180-in. cylinder engine was started on Nov. 12, and works exceedingly are putting in penthouse at the adit, and to-night commence cutting haft below by 12 men. The adit level west is now being pushed on by nd yields good ston 5 of ore. There is a v-ry promising lode in the rel wet, and we are slaking a winze below this level, which yields 1 ton lathom. This winze will ventilate the end and the pitch below. There it is not set of shaft, and one in the bottom low level east of ditto, at an average tribute of 125, 9d. in 17. We same set 35 tons of copper ore, and very promising lode; the part being carried is composed of bary tex, lead, rich copper ore, and quariz, with mondic inadletting out water—this lode we think cannot fall to become a rich givarce castward. There is another lode or branch that will strike into om the south in about 10 fathoms drying, when we think that we may expect a rich course of ore. There is no other change in the mine since port. The mine is still looking very well, and improvements are expect. The mine is still looking very well, and improvements are expected.

points.

i AIN.—T. Mitchell, Nov. 22: The 90 cross cut south, by six h, at 12. per fathom. We have another branch now crossing at 4 in. wide, mixed with copper ore and sniphur. The ground is stiffer for driving. We have also let a bargain to drive east, by two men, at 8. per fathom, to prove the branch met with h is from 9 in. to 1 ft. wide, yielding a little copper ore and very kindly. It may open out a wide lode in this direction pariment we have let 11 trioute pitches to 22 men, at the usual

te department we have let it tribute pitches to 22 men, at the usual is BRIDGE,—C. Williams, Nov. 29: The Rake vein in the 30 cast is downth 6 tons of lead ore per fathom, and likely to further improve the back over this level have just touched the rich ore ground developed below, and are worth 3 tons of lead ore per fathom. All other as last reported, producing lead ore cin paying quantities. Dressing lead ore going on r-gularly.

1.5.—S. Bennetts, P. Vian, Nov. 24: The lode in the 70 west is not so seen, and quite unproductive. In the 70 west it is 2 ft. wide, worth on 11 tho 50 west it is worth 77, per fathom. In the 55 cast, on a fit is worth 12, per fathom, and west, ou the same section, 71 per the western part of the mine the lode in the 48 end is worth 81, per in the 4 west 41, per fathom.

fathom.

ed to say that the engine shaft is down 21 yards

g floor, and, Nov. 28: The following bargains have been

for the dressing floor, i.—Join Garland, Nov. 28; The following bargains have been s. The 28 to drive east of new shaft by six men, at 107, per to drive west of Jones's winze by six men, at 127, per to drive west of Jones's winze by six men, at 127, per to drive east of Jones's winze by six men, at 127, per to drive east of Jones's winze by six men, at 127, per to drive east of Jones's winze by six men, at 127, per to drive east of Jones's winze will be stofness since the state of the six men, at 128, and the six men, at 128 and the six men expeditionsly, and at a considerable reduction in there is no change to notice in either of these levels since my rise west of Herbert's winze has been let to six men, at 127 per is still very kindly, and produces about 10 exts, of lead ore per level has also been let to drive east of Herbert's winze by six thom: there the lode produces full 1 ton of lead ore per fathom. Ins. to drive to reach the cross-course, these prices also include if by tackle to the 24. The 24 has also been let to drive east by rightly takele to the 24. The 24 has also been let to drive east by rightly takele to the 24. The 24 has also been let to drive east by rightly takele to the 24. The 24 has also been let to drive east by rightly takele to the 24. The 24 has also been let to drive east by rightly takele to the 24. The 24 has been let up to drive east by rightly and the stope over the 24, east of new winze, have been let 3mm, at 41 les, per fattom; the lode, which in many places iges a produce of 15 cets, of lead ore per fattom. At surface, must be a surface and the surfac

URROW.-William Rich, William Williams, Henry Abraham.

shifts lede leding disordered by a change of the ground and congenial for ore plated in the control of the cont

lofe has formed a junction with the main lode in the cross cut opposite shaft at the 45. I have suspended the driving of the 45 end west, and have put the men to drive a cross cut south lo fms. west of shaft. We have shout 14 ft, to drive to intersect the main lode. We hope to reach the lode in a fortnight from now. The machinery and pitwork is in pretty good condition, and working well. SOUTH TOLCARN E.—W. Rich, W. Hambley, Nov. 27: The tin lode in the trial shaft has a very rapid underlie; we have, therefore, begun to clean up an old shaft sunk on a lode further south with the view to sink it deeper. This south lode will maite with the tin lode in depth, and the ground is easier for sinking than on the north lode. The north lode in the shaft sinking below the 24 is looking very promising, and carries good stones of rich grey copper ore. The 24 end west yields a linke copper.

ing very promising, and carries good stones of rich grey copper over. The 24 and 185°. PATRCAG.—W. Francis, Nov. 28: The surp now being sank under the 130 yard level cross-cut, on the east and west vein, is now down a fit, the cross-cut has been and the level of the control is the control of the control is the control in an economic that is not to the control of the control of the control is the control in an economic of the control of the control is the control of t

discovered in cutting foundations of engine and boiler houses. It looks as if this side 2 tons; showing great improvement going west. The last 2 ft. have not been lode has formed a junction with the main lode in the cross cut opposite shaft at so productive, being spar mixed with blende and copper. How wide the lode is side 2 tons; showing great improvements going and copper. How wide the lode is so productive, being spar mixed with blende and copper. How wide the lode is we cannot say, but we shall continue cross-cutting until we come to the south wall, where we hope to find a leader of lead ore, as we did in the cross-cut south in the eastern level, which will produce I ton per fathom. From the appearance of the lode we think the south part is going down more perpendicular than the north, which is tavourable for productiveness in depth.

WE'ST ASSHETON.—J. Craze, J. Maley. Nov. 29: There is no change to remark throughout the mine since setting report. We have shipped the parcel of rel (12 tons) for Messrs. Weston, Son, and Co., and have sampled another percel of 15 tons for sale to morrow, and we hope to sample a parcel of blende (7 tons) on Tuesday next.

lô tons for rale to morrow, and we hope to sample a parcet or brende (1 tons) on Tuesday next.

WEST GODOLPHIN — John Pope, Nov 28: The shaftmen are making very good progress is sinking Wilson's shaft below the 70; also the men in driving the 70 north on the counter logle, to cut Wilson's lode; but the air is getting very light in this level, so I have to-day put a pair of men to put in air-pipes from the 60; where we have a good current of air down to the 70, which I am hoping will have a good effect. In the 60 driving west on Pink lode we have met with a cross branch 5 in, wide, but we have not got the western side of it far enough to say anything about the lode. The value of the bargains are just the same as for some time past. I will send full report in time for the committee meeting on Tuesday next.

next.

WEST ROSKEAR.—H. Stephens, W. Bennetts, Nov. 29: The engine is keeping the water down pretty well considering the almost incessant heavy rains, but
there is no change to notice in any one of our points of operation since the last
report.

WEST ROSKEAR.—H. Stephens, W. Beunetts, Nov. 29: The engine is keeping the water down pretty well considering the almost increasant heavy rains, but there is no change to notice in any one of our points of operation since the last report.

WEST TANKERVILLE.—Arthur Waters, Nov. 29: The 68, south of boundary shaft, is in a lode 4ft. wide, worth 1 ton per fathom. The 75 end south is in a lode 5ft wide, yielding good orestuff. The four stopes in this level, north and south of the winze, are worth together 2 tons per fathom. Two stopes in the 63 south are worth together 2 tons per fathom. We are putting up gear for pumping at the above shaft, as the water can be kept clear at less cost with pumps than with harrels, as now. Our usual sampling takes place on Thursday next.

WEST WHEAL TOLGUS.—Nov. 28: There is no alteration to notice in the bottom of Taylor's shaft; the ground continues hard. The lode in the 145 end west is improving; the lode is about 3½ ft. wide, with a leader from 12 to 15 in. wide solid ore. The lode in the 135 end west is more regular than it has been, and is opening wider, but very little ore in it, neither do we expect much yet. The lode in the 125 west is smaller than it has been; now about 2 ft. wide, yielding 2 tons of ore per fathom. The stopes are yielding very well. Kichards' shaftmen are sending down their work to the 9' with the new capstan and rope. We shall be hindered in the shaft for some days—probably four or five at least. We shall be hindered in the shaft or some time earlies. We shall be undered in the shaft or some time affect of the probably four or five at least. We shall ake out all the pipes from across the five bollers, and put in new ones and larger; they are all in the boller house in readiness. We shall commence to change them on Friday morning; at the same time we shall commence to change them on Friday morning; at she same time we shall commence to change them on Friday morning; at she can completing the whole of the work by Saturday evening; we shall have a good forc

tro stops in the back of the 108 are worth about 15° per fathom each. The lods in the 72 cast is small and poor. The lode in the 48 cast is 5 ft, wide, but at the present time it is disordered by a cross branch running through the lode, but this change I regard as temporary, as 9 ft, behind the end the lode is large and the 15° to 10° t

THE COMMERCE OF AUSTRALIA AND THE UNITED STATES CON-THE COMMERCE OF AUSTRALIA AND THE UNITED STATES CONTRASTED.—A French paper give some interesting statistics showing the relative proportions of the trade of our Australian colonies and that of the United States in the year 1875, when, it is stated, the total imports to and exports from Australia amounted to 91,700,000., or about 40′ per head in a population of 2,300,000. The value of the exports from the United States in the same period amounted to less than 6′. per head in a population of 40,755,000, while on the other hand the exports from these colonies are stated to have been of the average value of 21′. per head of the population. The full meaning of these figures can be better realised when it is stated that the total value of the produce, agricultural and manufactured, exported from the United States, combined with the foreign imports—or in other words the whole productive power of the country was in 1370 only 26′. per head of the population. Great Britain itself, whose commerce almost equals that of all other countries in Europe combined, imports goods to the value of only 20′. per head. Contrusting the Australian gold mines with those of California, our French contemporary states that the produce of the former has been hardly less important than that of the El Dorado of the West. Since the discovery of the Victorian gold fields, that province alone has exported 170,000,000′. worth of the precious metal.

TRAMWAYS IN SPAIN.—It appears that Mr. William Abbott, apparently d-termined to keep at the front of tramway enterprise, is to pushing tramways there.

With this week's Journal a SUPPLEMENTAL SHEET is given. With this week's Journal a SUPPLEMENTAL SHEET is given, which contains: Original Correspondence; Colliery Managers, and Science and Art Examinations; Colliery Explosions (F. Kossuth); The Lighting of Collieries (W. E. Teale); Improved Stamps; The Trial of Rock-Drills in Cornwall (Leam and Son); Boring Machinery J. Barkell); Tonite, and its Advocates; Tonite Explosive; Instability of Nitroglycerine Compounds; Electric Lighting—No. III. (A. Vassard); Manganese in the Alvs; The Government Gold Mines at Siam (F. W. Pool); New Quebrada Company (N. Learoyd); New Quebrada and Bolivar Railway Companies (E. D. Matthews); Cape Copper Mining Company; Lead and Tin Mines; New Application for Tin: The Custom of Relinquishment; Cost Book System—Teleigh Wood (T. B. Laws); Industry is Wealth (R. Tredinnick); Reported Valuable Discovery in Wales (A. Evans); Slate Quarrying in Cardiganshire; Parys Mountain Mine; Llanrwst Lead Mine; West Pateley Bridge Lead Mines (J. J. Truran); Trebeigh Consols Mine; Old Treburgett Mine; Roadways and Footpaths; Scottish Australian and Chontales Mining Companies, &c.

TO THE METAL TRADE.

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The Mining Market: Brices of Metals, Ores, &c.

METAL MARKET-LOYDON, NOV. 30, 1877.

ISON. £ s. d. £ s. d	TIN. 2 . d. 2 . d
Pig. 6MB, f.o.b., Clyde 2 12 3-	English, ingot, f.o.b 72 0 0 - 73 0
Scotch, all No. 1 2 14 0- 3 10 0	, bars , 73 0 0- 74 0
Bars, Welsh, f.o.b. Wales 5 5 0- 5 10 0	refined 75 0 0
in London. 5 17 6- 6 0 0	Australian 67 0 0
Ga. Wand 7 0 0 - 8 0 0	Banca 69 0 0
in Type or Tees 5 1) 0- 5 15 0	Straits 66 15 0
Swedish, London 9 5 0- 9 12 6	
Rails, Welsh, at works 5 0 0- 5 2 6	COPPER.
Railway chairs	Tough cake and ingot. 69 0 0- 70 0
	Best selected 70 0 0- 71 0
Sheets, Staff., in London 8 15 0- 9 0 0	Sheets and sheathing. 74 0 0
Plates, ship., in London 7 0 0- 7 5 0	Fiat Bottoms
Hoops, Staff	
Nail rods, Staff. in Lon. 7 0 0-7 5 0	
At their a could be constituted as a constitute of the constituted as a constituted as a constitute of the constituted as a constitute of the const	Other brands 70 10 0
STEEL.	Chili bars, g.o.bnom. 63 0 0
English, spring16 0 0-20 0 0	PHOSPHOR BRONZE.
,, cast35 0 0-45 0 0	Bearing metal £113 0
Bwedish, keg16 0 0	Other alloys £120 0 0- 140 0
so rug. maint	
LEAD.	BRASS.
English, pig, common . 19 5 0	Wire 8d
L.B. nom.19 15 0	Tubes10
W.B20 0 0	Sheets 9
sheet and bar. 20 10 0	Yel. met. sheath. & sheets. 61/4 - 7d.
nine	Nails composition 834 - 9
red22 5 0-22 10 0	Tru pramma to perham
white	TIN-PLATES.* per box.
nutent shot24 10 0	Charcoal, 1st quality 1 0 0 - 1 1
Spanish19 0 0 19 5 0	" 2nd quality 0 19 6- 1 0
QUICKSILVER.	Coke, 1st quality 0 18 0
Flasks of 75 lbs., ware. 7 50-	" 2nd quality 0 17 6
	Blackper ton 16 0 0- 16 10
SPELTER.	Canada, Staff. or Gla., 11 10 0- 12 0
Silesian or Rhenish 19 5 0- 19 7 6	
English Swansea 21 0 0	Black Taggers, 450 of 30 0 0-
Sheet zinc 22 10 0- 24 0 0	14 × 10

* At the works, is. to is. 6d. per box less for ordinary; los. per ton less for Canada; IX 6s. per box more than IC quoted above, and add 6s. for each X. Terue-plates 2s. per box below tin-plates of similar brands.

REMARKS .- The markets at present do not display any return of activity; indeed, they are very inactive at the moment, but one thing is perfectly clear, that however distant the general revival may be it must of necessity be drawing nearer than it was; and although no great expectations are likely to be realised during the activity; indeed, they are very macked at the moment, out on thing is perfectly clear, that however distant the general revival may be it must of necessity be drawing nearer than it was; and although no great expectations are likely to be realised during the remainder of this year, yet we look forward with a certain degree of confidence to the coming year, as inaugurating a new era in the metal trade. Some may be a single differ from that of 1877. To satisfy everyone on such a price of the single of the command of the single of the command of the single of

markets if the two events we have just referred to were immediately put right, for it is not only the impulse they would receive from the advantages of peace and a settled Government in France, but prices are so extremely moderate that they would rise upon their own merits, for cheap prices invariably atimulate consumption, and there is a great deal of work been neglected or suspended which will have to be repairabled, and if the crops in India and elsewhere will require to be replainabled, and if the crops in India turn out as promising as they are expected there may be a considerable increase in exports to the East next year. The last harvests in America and Australia being very good ought al- to improve trade in those directions. There must also be taken into consideration the increased demand for Turkey and Russia upon the cessation of hostilities and the re establishment of peace.

influence upon the market. There is nothing to complain of now in the present prices, but the amount of business is so very in-legificant that it is thought by many that prices must drop 2.0 or 3.0, before anything like a general revival sen in; and, if the state of legitimate trade is cline. It is a lower rate than well thought at one time would be necessary to stimulated to consumption sufficiently to absorb the additional supplies, but in this respect, mintaken, for it would appear thought at one time would be necessary to stimulate consumption sufficiently to absorb the additional supplies, but in this respect, mintaken, for it would appear that we under estimated the requisite extent of depreciation. Sellers blamed as for making public the trath, but how mach appear the supplies of the supplies of

Week ending Nov. 25, 1876... Week ending Nov. 24, 1877... Decrease
Total decrease for 1877

Imports of Middlesborough pig-iron into Grangemouth:—
Week ending Nov. 24, 1877
Week ending Nov. 25, 1876 .. Tons 8,917

quoted upon last week's rates. SPELTER quiet, but steady.
Tin-plates unchanged, but orders are limited.

QUICKSILVER.—There is no change, and the position remains in all respects as last reported. Price 7l. 5s. Importers stock small, and demand of a normal character. California remains 44½ to 45c.; and China has resumed drawing supplies freely, the steamer which flasks on board. Salpments for the week ending 8th inst, 2173 flasks, against receipts 1174 flasks.

would rise upon their own merits, for cheap prices invariably stimulate consumption, and there is a great deal of work been neglected or suspended which will have to be repointed hereafter, and stocks in India and elsewhere will require to be repointshed, and if the corpor in India turn out as promising as they are expected the remay be a considerable increase in exports to the East next year. The last harvests in America and Australia being very good ought al- to bimprove trade in those directions. There must also be taken into consideration the increased demand for Turkey and Russia upon the cessation of hostilities and the re establishment of peace.

Once more, and our catalogue for this week is complete. The money market for some time past has been in a very sensitive and uneasy state, and it looked as if Bank rate would have to be advanced to a serious point before any check could be put upon the efflux of bullion, but that disquieting element no longer threatens us, and the improved position of the Bank enabled the directors yesterday to venture upon a resistion of 1 per cent. Speculation has not yet begun, and it is doubtful whether it will be generally entered upon until some very prominent feature presents itself. We aliade more particularly to the public being drawn of the content Tin.-The amount of business reported this week has been rather

tralia, because until we definitively know to what extent and at what rate future supplies will be forthcoming there can be no security.

No one can begradge the profit to the Australian importers on arrival parcel, considering what heavy losses they must have sustained during the last two or three years, but for the present we do not see the prospect of establishing any perment have been petitioned to construct proper roads up to the mining any perment have been petitioned to construct proper roads up to the mining overament have been petitioned to construct proper roads up to the mining of the time that the value of the time to the port of shipment, but naterially lessent the cost, and if the cost, and if the cost, and if the stand previously afford to sell it at 581, we see no reason, with the improved means of transit and the reduced rate of carriage, but what they will be able to come of the miners, we are bound to take notice of the fact, and the estimated vineral upon it by the Australians. This comparatively new source of supply must be fathomed, that dealers here may be able to form some opinion of its probable range in value; in the meantime, speculators and dealers should not allow themselves to exarried away by any delusive hopes, and move along very quietly and cautiously. The present stock in London is 8737 tons against 2466 tons on Oct. 31, the deliveries for the month being 1016 tons, which is so far satisfactory.

THE IRON TRADE.—(Griffiths's Weekly Report).—Friends.

THE IRON TRADE.—(Griffiths's Weekly Report).—Friday Evening. The Glasgow market for Scotch-pig fron has been steady during the week, with a signity upward tendency. The price in Glasgow this evening at the close vasces, and the second of the price in Glasgow this evening at the close vasces, and the second of THE IRON TRADE.—(Griffiths's Weekly Report).—Friday Evening

New Year.

Mr. Thomas Davis, of Goldshill, died yesterday evenin after an acute illness several days. The trade in fluished irou continues much depressed on the Tee. At the Birmingham Exchange yesterday the market was remarkably quiet. The meeting was cheeriul, the makers of irou patiently waiting for a better tade, which most of them are expecting soon. We have no contracts to report in rais this week, either in iron or steel. Great complaints are being made in the properties of the propertie

Messrs. PIXLEY and ABELL.—Gold: Since the circular of the 22nd Int. we have received the following amounts:—Per P. and O. steamer from Australia, &c. 564,000.; per Scrata, from Pacific, 23,8300; per Moselle, from West Indies, 45,830.; and from New Zealand, 564,00: total, 659,210. There was so little demand for gold at the close of last week, that it was thought that the whole of the above total would go the Bank, but the sovereigns only have been sent in to the value of 290,000., and the balance has been taken off the market by Germay. Sovereigns have been withdrawn for Egypt, &c., to the extent of 125,000.—SILYER.—Notice having been given that the India Council will receive toder for bills on Calcutta and Bombay on the 12th proximo, the silver market has been come slightly weaker, and transactions have taken place between 544(4) and 544, per oz., the latter being the closing price for to day. The Sorata brought 37,179. from the Pacific—sold at 544(4; 10,1504, from America and 16,000, from Germany have been placed at 544, to 54/54; and the 42,400.6 from the West India remains to be disposed of. The P. and O. steamer takes 87,2001, to India.

The settlement of the fortnightly account has occupied the chief attention of the dealers in the MINING SHARE MARKET this week, and it showed a great increase in the amount of general business transacted of late, not only in speculative shares, but in dividend mines for investment. After the settlement renewed activity setin, and several mines have been more in demand, and some of them at

TIN SHARES have been generally flat, and very few transactions recorded. The fact is that when tin began to five a few weeks ag the reaction in shares was not only too rapid, but too artificial. In the excited state of the market, when most people were expecting to see shares keep on advancing, and consequently very few holders were disposed to sell, telegrams kept arriving from Conwall with buying orders, which seldom result-din anything more than getting up quotations and adding to the excitement. But when shares som afterwards began to be offered at the advanced rates no buyers appeared, and every fresh attempt to sell was succeeded by a fresh drop in quotations.

drop in quotations.

The sale of Banca tin took place on Wednesday, and averaged a price equal to 694, 10s. per t m in London. After this, stocks having greatly decreased, the English market for tin seemed to tighten and on Friday there was a decided improvement in the market for tin greatly decreased, the English market for tin seemed to tighten and on Friday there was a decided improvement in the market for in shares, and quotations were a little advanced. Carn Brea leave of 47½ to 50; Tincroft, 17 to 18; the meetings of these mines are held in Cornwall to-day, and the particulars will be given next week. Delocath, 36 to 38; Cook's Kitchen, 2½ to 3; South Condurrow, 9to 9½; South Crofty, 10½ to 11½; South Frances, 3½ to 3½; Est Lovell, 1 to 1½; West Frances, 4 to 4½; Wheal Agar, 4 to 4½; Wheal Basset, 14 to 16; Wheal Grenville, 3 to 3½; Wheal Kitty (St. Agnes), 2½ to 2½; Wheal Peevor, 5½ to 6½; we understand a good profit will be shown here at the next meeting. Wheal Uny, 22s. 64 to 27s. 64.; West God Jphin, 2 to 2½.

Copper Mines keep flat, though the general impression is that copper will improve in price ere long. Devon Great Consol, 2½ to 2½; at the meeting the accounts, to which we referred last week, were submitted and passed. Hingston Down, 5s. to 10s.; a call of 1s. per share has been made. Marke Valley, ½ to ½. Parys Mountain, 10s. to 12s. 6d. Penstruthal, 5s. to 7s. West Seton, 14 to 16. West Tolgus, 64 to 66. Bedford United, 3s. to 5s.

LEAD MINES are moderately active, and a good business has been done during the week in Van, Great Laxey, Rookhope, North Lave, D'Eresby Mountain, Leadhills, East Van, and others. Tankerills are weak, and more treely offered at 4½ to 5; the accounts for the six months lending Oct. 20 have just been issued, and are made to show a profit on six months' working of 762. 9s. 1d., and a balance of assets over liabilities of 10622, 5s. 4d. The lead ores sold for six months, from April to October (550 tons), realised 7194, 18s. 9d. The cost for six months, but which are only charged up to August, are 71182, 9s. 8d., or an average of about 11804, per month. The agent says that he cannot but hold out great hopes that the "urning point" is coming, and that the mine will have a return of pro-

costs for six months, but which are only charged up to August, at 71181. 2s. 8d., or an average of about 1180l, per mooth. The agest says that he cannot but hold out great hopes that the "turning point" is coming, and that the mine will have a return of presperity as of yore. On Thursday 100 tons of lead ore sold for 1242l. 10s. Lisburne, 70 to 75; the directors declared a dividend of 1l. per share on Tuesday. North Cornwall, 5½ to 5½; an important improvement is reported in the south, or Col. Coryton's, part of the sett. Roman Gravels, 7½ to 8½; Van, 30 to 32; Great Laxey, 2½ to 22½; Leadhills, 4½ to 4½; L'anrwst, 2½ to 3; East Van, 3½ to 4; North Laxey, 8s. to 10s.; Herodsfoot, 7 to 8; Pateley Bridge 3½ to 4. Aberdaunant, ½ to ½; Glyn, ½ to ½; Ladywell,½ to ½; Pandors, ½ to 1; Gorsedd and Merllyn, 5 to 5½. Rookhope shares advanced to 26s, but leave off weaker, at 23s. to 25s. Van Consols, ½ to 5outh Cwmystwith, 3½ to 4; the a counts here show cash at banker, 629l, 5s. 6d.; calls in arrear, 1193l. 15s.; uncalled capital, 1500l. Red Rock, 2 to 2½; the accounts show cash at bank, 420l, 9s. 1½; unpaid calls, 329l. 15s.; further calls to be made, 1797l. 10s.; and shares in reserve, 2000l. The mine has sampled 40 tons of lead ore, and the agent hopes to make regular and satisfactory returns. West

shares in reserve, 2000. The mine has sampled 40 tons of lead or, and the agent hopes to make regular and satisfactory returns. West Wyo Valley, 33 to 4; the accounts issued show assets 1905/15a, 94 to the end of October; since then a dividend has been declared, no ore have been sold, but the agent hopes to sell 50 tons of lead by the

and of D shaft is 21 to 3: have adv North d chequer. 23; IX. brada, 2 Richmon The M

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somewh tlement producin less adve declines With were me ing. and a consid-of depre to his of received would be the diffe 74. pr His view the last ceived 5 whilst t was 69/.

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184. 9d. The August, are The agent e "turniturn of pr turn of provide and of the axey, 21½ to an, 3½ to 4½; Pandora es advanced at the axey and a sole, § to ½ and a to an kersolital. 1500%

pital, 1500/. 120/. 94. 1d.; 17. 10s.; and of lead ore, urns. West 105/. 15s. 9d. declared, no lead by the end of December. West Pateley Bridge, 2 to $2\frac{1}{2}$; West Tankerville, 14s to 16s.; Derwent, 1\frac{3}{2} to 2. Glenroy, 15s, to 20s.; the lode in the 14s tis still large, and contains a little lead and blende. The 25 fm. level end south is 2 ft. wide, and yielding saving work for blende.

of 18 wide, and south is 2 ft. Chondes have been in demand, and $\frac{3}{2}$. Don Padri Foreign Mines.—Argentine, $2\frac{1}{2}$ to 3; Blue Tent, 3 to $3\frac{1}{4}$; Condes, $\frac{1}{2}$ to 3; Hultafall, 5 to $5\frac{1}{2}$; Chontales have been in demand, and have advanced to 12s. 6d., 15s.; Cedar Creek, $\frac{1}{8}$ to $\frac{3}{8}$; Don Pedro North del Ray, 8s. to 10s.; Eberhardt and Aurora, 6 $\frac{3}{8}$ to $7\frac{1}{4}$; Exchequer, 4s. to 6s.; Flagstaff, 2 to $2\frac{1}{4}$; Frontino and Bolivia, $2\frac{1}{2}$ to $2\frac{1}{2}$; Lx., 5s. to 7s.; New Zealand Kapanga, $1\frac{1}{8}$ to $1\frac{3}{8}$; New Quebrids, 2 to $2\frac{1}{2}$; Pestarena, 5s. to 10s.; Port Puillip, 12s, to 14s.; Richmond, 9 to $9\frac{1}{2}$.

The Market for Mine Shares on the Stock Exchange has shown

Richmond, 9 to 9½.

The Market for Mine Shares on the Stock Exchange has shown somewhat less animation, owing to some extent to the general settlement at the beginning of the week proving a small one, and thus producing a feeling of depression; mine shares, however, have been producing a feeling of depression; mine shares, however, have been great age and it must be admitted that the parallels which he draws from a consideration of the periods which have succeeded former times of depression closely corresponding with the present add much force to his observations. He shows that the Davon Great Consols only received 25.5, 51, per ton for ora for which ten years ago they would have received 55, per ton, and that on a single quarter's sales the difference equalled 36002, which would represent more than 75, pr share dividend, and anticipates a speedy general revival. His views are to a great extent borne out by the average result of the last Cornish Ticketing. Taking the whole sale the miners regived 50%. Hes. per ton for the fine copper contained in the ore, whilst the market quotation on the same day for tough cake copper was 69%. Now, the produce of the ore sold at the ticketing in question being 7½ per cent. it follows that 14 tons of ore would yield 1 ton of metallic copper, and the difference between 69% and 50% 16s. is 18% 4s., consequently the smelters charged the miners 1% 6s. per ton of ore to provide for cost of smelting, interest on smelters' capital, cost of selling the metallic copper, and smelters' trade profits. The actual cost of smelting has been estimated at 1% 2s. per ton of ore upon the average.

The nefarious practices of accountants and voluntary liquidators in nursing a winding-up until the whole assets are absorbed in their so called professional (although in truth these individuals only come within Stuart Mill's class of "un-killed clerks who should not in justice receive higher wages than bricklayers' labourers'') charges, and nothing is left for the unfortunate creditors have frequently

graditor has received 29s. in 11.

Port Phillip. \(\frac{1}{2}\) to \(\frac{3}{2}\); the telegram just received from Melbourne gives the results for the month ending Nov. 7. The gold obtained from the company's quartz was 584 ozs, and from tributers' quartz 335 ozs. The profit was 1800\(\text{...}\), of which 100\(\text{...}\) has been remitted. St. John del Rey. 310 to 330; the telegrams received during the week states that the profit for the month of October was 6800\(\text{...}\), the set having heen 600\(\text{...}\) and the average. All is going on well. week states that the profit for the month of October was 6500%, the cost having been 600% above the average. All is going on well. The produce for the second division (11 days) of November was 15,500 oits, of the value of 6000%, the ley of the ore being 7.8 oits, per ton. Don Pedro, \(\frac{3}{8}\) to \(\frac{1}{2}\); the latest telegram from Rio states that the produce cleaned up for the first division of November was 1650 oits as. San Pedro, \(\frac{1}{8}\) to \(\frac{3}{8}\); the pitches working on tribute are laving small profits for the company, and everything in and outside the nine is working astisfacturily.

aving small profits for the compuny, and everything in and outside the mine is working satisfactorily.

Richmond, 9 to 9½; the usual weekly telegram from the mine tates that the week's run was \$75,000, from 1000 tons of ore with here furnaces. During the week the refinery produced \$35,000. The mine is looking well. The gross yield for the quarter ending 0:t.1 was \$135,743, and the profit \$47,578½. The amount of ore reduced was 2674 tons. These figures represent a run at the furnaces of less than see month, the works having been started up early in September. The crepresed a net product of within a fraction of \$55.50 per ton. The waste in hiding and reducing the ores from both mines will average nearly 20 per cent, his loss occurring in the precious metals being carried off in the dust, fron, and has. Dilly assays are made at the works, and watch is kept of the smelters to se that this percentage is reduced as low as possible. The principal loss is in he item of dust, and is estimated at 13 per cent. The from carries from \$15 to \$10 in gold and silver per ton, and is a total waste, while the slag will run from \$15 to \$10 in fold and silver per ton. and is a total waste, while the slag will run from it is estimated that not less than \$3,000,000 are contained in the huge piles hat by in front of the Eureka furnaces.

The gross yield of the Eureka Consolidated during the same time was \$500,650. The profit on which after paying all expenses except three furnaces.

the hy in front of the Eureka furnaces.

The grows yield of the Eureka Consolidated during the same time was \$600,650. The profit on which, after paying all expenses except transportation to New York, was \$337,461\frac{1}{2}\$. This amount was the product of 12,255 tons of o.e. The cost of hauling is placed at \$909\frac{1}{2}\$, that of mining at \$74.363\$, and of reducing at \$129,631\frac{1}{2}\$. The quarterly tax of the company will be \$9085\frac{1}{2}\$. The net yield of this ore averaged within a fraction of \$49\frac{1}{2}\$ per ton.

Flagstaff, 2\frac{1}{2}\$ to 3; the dispute in Utah between the "learned and caltured judge" McBride and "the pure Lycurgus" Edgerton continues with much animation a letter of more than two columns appearing in the Salt Lake Tribune of Nov. 4, and some facts which may have escaped the notice of the shareholders are being brought forward. Mr. Edgerton states that so far from "coming to Utah eating the bread ethaity," Pearson, Harvey, Vincent, and himself "each received 210\frac{1}{2}\$. Sterling for their travelling expenses, which aum was drawn from the sum appropriated to that purpose from contributions made by the shareholders in London. Some rather warm language has been used, the descriptions being that "Harvey is a rige villain from Tinpot Alley, Vincent a clever nobody, Pearson a weak old fool, Billing a cunning sharper, Beatty as an infant in arms wet nursed at the expense of the Flagstaff Company, and McBride sate that wayer who drew the deeds." Mr. McBride stated that for ten months' services as attorney to the Flagstaff he "had received to date \$2200 all told," but Edgerton retorts that anyone by examining the reseries of the Court may learn that a judgment has been confessed in McBride's favour for the unpaid portion of his salary at the rate of \$10,00 a year, and that he is drawing 10 per cent. interest on the balance. At a meeting at which Roborough, Merritt, Pearson, McBride, Harvey, Hunter, and McBride's favour for the unpaid portion of his salary at the rate of \$10,00

sture to give possession of furnaces to Hanter, \$150.00; making the total amount intend by Hanter \$352,561. Well may Edgerton say that the accounts struck is meeting dumb, and the interview was consequently a short ope.

Hunter Consolidated (fully-paid), 9½ to 10½; the telegram received in Wednesday states that the furnace had run seven days, producing \$11,000. The manager's report (Nov. 4) stated that the furnace has running all right, except the lead well, which has to be modified. Nothing is lost by the present mode of operation. Exchequer, 5, 1,65; there has been postbing to note, and there are few trans-Nothing is 15 t by the present mone of vigating the set of there has been nothing to note, and there are few transactions in the shares. I. X. L. 4s. to 6s.

Hu t fall, 5 to 5½; the latest advices are considered satisfactory.

The lode in the bottom of the shaft has increased in width fully 3ft, solid lead and blende. Nearly the whole of the machinery has arrived, both for the mines and dressing floors, and from present 8ppearances it is expected that the dressing machinery will be at work in January. The last valuation of the lode showed 4 tons of lead an 114 tons of blende per cubic fathom. The lode is now 3 fms. in width.

in width.

Lead Mines have been active throughout the week. Van, 30 to 32;

brehangs to report from the mine. Everything progressing as usual.

Gregwin on, 3\(^2\) to 4\(^4\); the usual monthly parcel of 100 tons of lead sold yesterday realised 12\(^4\). Per ton. Wye Valley, 2\(^4\) to 3\(^4\); the unanger reports that the 22 east has again improved, and is looking promising. West Wye Valley, 3\(^4\) to 4\(^4\); the accounts received from the mine continue satisfactory. Red Rock, 2 to 2\(^4\); the first sale since it has been worked by the present company took place yesterday, when 40 tons of lead were sold at 11\(^4\) per ton. The annual report for the general meeting has been issued, and

is of an encouraging character. A large amount of development work has been accomplished in the past 12 months, and the internal works and the dressing machinery have been rendered efficient for dealing with large parcels of lead, whilst the prospects of the mine dealing with large parcels of lead, whilst the prospects of the mine at various points, and particularly in the deep levels, are encouraging. Caron, $2\frac{1}{2}$ to $2\frac{3}{4}$; the mine is being rapidly put into full working order, and the new machinery will soon be erected. The new shaft is almost completed, and the lode is opening out productively at all points of operation. There have been many purchases of these shares for investment, and the price is steady. South Cwmystwith, $3\frac{1}{2}$ to 4; the annual report has been issued. A great deal of underground and surface work has been accomplished since the last meeting, the levels having heap greatly extended and somether set of ground and sarrace work has been accomplished since the last meeting, the levels having been greatly extended, and a complete set of dressing machinery, comprising a 20-ft, water-wheel, crushing mill, Blake's stone-breaker, patent jiggers, buildles, &c., has been erected. A parcel of 30 tons of lead is to be ready for sale before the end of the current month, and regular monthly sales are to follow. St. Harmon, 2\frac{3}{4} to 3\frac{1}{4}; prospects continue to improve, and the south lode is expected shortly to be cut, when further valuable discoveries are considered likely. The mine is visibling some fine. discoveries are considered likely. The mine is yielding some fine Pateley Bridge, 3½ to 4; the 40 east, on Rake vein, is still worth

Pateley Bridge, $3\frac{1}{2}$ to 4; the 40 east, on Rake vein, is still worth 6 tons per fathom, with an appearance of improvement. The stopes behind the end are just coming into the rich ore ground. No other change. Dressing and smelting proceeding regularly. West Pateley, 2 to $2\frac{1}{2}$; an official circular has been addressed to the shareholders informing them that the Chairman visited the mines a few days since, and that they are opening out in a most satisfactory and encouraging manner. The circular states that great progress has been made in development and in the construction of the necessary works: a water-wheel crusher ingers grating and gless has been inded in development and it the construction of the necessary works; a water-wheel, crusher, jiggers, grating, and dressing-floors have been erected, iron rails are on the ground for laying the tramways, a Robey's patent drawing-engine has been purchased for cash. It is added that the first parcel of lead will be smelted in December, from which date the smelting will proceed

Smelted in December, from which date the shields of the programmy.

Subjoined are the closing quotations:—

Assheton, ¾ to 1; Carn Brea, 48 to 52; Devon Great Consols, 2½ to 2½; Dol coath, 37 to 39; East Carndon, ¾ to 1½; East Lovell, ½ to ½; East Van, 3½ to 4; Gleiroy Load, ¾ to 1; Great Laxey, 21 to 22; Hingston Down, ¾ to 5½; Leadhills, 4½ to 4½; Marke Valley, ¾ to 7½; Pateley Bridge, 3½ to 4; Penstruthal, ¾ to 3½; Roman Gravels, 7½ to 8; Rockhope, 1½ to 1½; Tanker-ville, 4½ to 5; Tincroft, 19½ to 11½; Van, 30 to 32; West Assheton, ½ to ½; West Chiverton, 13 to 14; West Pateley, 1½ to 2½; West Tanker-ville, 4½ to 8; Argentine, 2½ to 3; Birdaeye Greek, ½ to ½; Blue Tent, 3to 3½; Cape Copper, 33 to 35; Cedur Creek, ½ to 3; Bor Pedro, ½ to ½; Eberhardt and Aurora, 6½ to 7½; Exchequer, 8a, to 6a; Emma, ½ to 5½; Eberhardt and Aurora, 6½ to 7½; Exchequer, 8a, to 6a; Emma, ½ to 5½; Eberhardt and Aurora, 6½ to 1½; East Chance, ¾ to 1; Kew Quebrada, 2½ to 5½; Respanga, 1½ to 1½; East Chance, ¾ to 1; New Quebrada, 2½ to 5½; Respanga, 1½ to 1½; East Chance, ¾ to 1; New Quebrada, 2½ to 5½; Respanga, 1½ to 1½; East Chance, ¾ to 1; Sun Pedro, ½ to ½; Sierra Buttes, 1½ to 2; South Aurora, ½ to 3; San Pedro, ½ to ½; Sierra Buttes, 1½ to 2; South Aurora, ¼ to ½; Tecoma, ½ to ½; United Mexican, 1½ to 1½; Oregon perf., 4 to 4½.

Collieries.—The past week, as regards the market for this class of shares, has been no exception to the rule, being almost void of transactions. There are, however, outside the market not wanting elements of comfort to the coal and iron master. Among these may elements of comfort to the coal and iron master. Among these may be mentioned the rise which has been taking place in the price of some of the metals. The especially has had a considerable advance, and though this may at first sight be thought not to affect our coal and iron mines, upon consideration it is by no means to be set on one side, for over a period of years it is curious to note how quickly the price of one metal reacts upon that of another, a satisfactory rise in one case being speedily followed by an advance in the reat. In South Wales there is another element of a gratifying nature—a slight rise in the price of iron. The demand for tin-plate making exceeds the supply, and some further advance is likely to take place in the special class of iron required by the industry named. At Liverpool trade continues brisk, and the Chapel House Colliery Company is said to be as full up with orders as ever. The new pit is now down 340 yards, and is progressing favourably. The shares in this company have been heavily "beared," and great difficulty is experienced in completing orders, there being no shares on the market. The price remains firm at 3 to 3½. Alltam is hares close at 4 to 4½; the main coal is now being won through the tunnel at section D. The prospects of the company continue very good. Media hygoed close at 2 to 3, and Llay Hall at \$10 to 18. We Sharlstone and Newport Abeream are each quoted at slightly higher prices, leaving off at 3½ to 4½, and 4 to 4½; respectively. Thorp 6 Gawber, close at 2½ to 2½; Knowles and Son, 19½ to 19½; Cardiff and Swansea at ½ to 1½; Cakemore, 4 to 4½; Benhar, 8½ to 9; Consett Iron, 18 to 18½.

At the Truro Ticketing, on Thursday, 3240 tons of copper ore were

At the Truro Ticketing, on Thursday, 3240 tons of copper ore were sold, realising 11.821L 18s, 6t. The particulars of the sale were—Average standard, 87L 14s.; average produce, $7\frac{1}{4}$; average price per ton, 3L 13s.; quantity of fine copper, 236 tons $8\,\mathrm{cwts}$. The following

The Color of the C

10., and in the pitce per ton of ore about 9d.

Mr. Stephen Williamson (Balfour, Williamson, and Co, Liverpool)
has joined the board of the London and Lancashire Fire Insurance Company.

Mr. Frank Livesay has been appointed manager of the City branch
of the Briton Life and Britannia Fire Associations.

Messrs, N. Hingley and Sons, of Netherton Ironworks, Dudley,
have appointed Mr. R. S. Cunningham their sole agent in London, and the offices
are removed to Watling street.

The report of Norton Brothers and Co, for the year ended Oct. 31
shows a proint of 21,639/1, which is thus disposed of:—To the payment of a dividend of 8 per cent., 14,400/1; debenture interest, 987/1; directors' remuneration,
1638/1, balance for claims in abeyance, 2500/1; and to the reserve fund, 2214/1.

MINING EXTERPRISE IN CENTRAL AFRICA.—It appears that already efforts are being made to turn the African explorations of the past few years to commmercial account, and it is gratifying to learn that the copper and other miners in the nighbourhood of the Livingstone have been chosen for the first explorations.

Copper Mines and Copper Smelters—Devon Great Consols.—The shareholders have certainly to be congratulated in having Mr. Peter Watson to preside over them at their half-yearly meeting on Wednesday, in the absence of the regular Chairman, through ill health. In another column will be found a very full account of the meeting, to which the attention should be called not only of the shareholders in Devon Great Consols, but of other copper mines, both at home and abroad, likewise the copper smelters. Mr. Peter Watson has most ably and thoroughly ventilated the present position of the copper trade and copper mines, and all concerned will quite agree with him in thinking that the shareholders in Devon Consols and other mines—be they copper, tin, or lead—should not give way to too desponding a feeling in the present general depression of trade, for a revival will most assuredly set in, and that perhaps at no very distant period, when the price of metals is sure to advance. There is no question but that the shares in many of the leading copper, tin, and lead mines are quoted at unduly depressed prices, and, therefore, it is a good time to make investments.—Nil desperandum. desperandum.

PATELEY BRIDGE (Lead).—The valuable discovery made three weeks since continues to maintain its former reported value. The manager this week writes that the Rike vein, in the 30 east, is 8 ft. wide, and worth 6 tons of lead ore per fathom, and likely to further improve. The stopes in the back over this level have just touched the rich ore ground developed in the level below, and are worth 3 tons of lead ore per fathom. All other points remain as last reported, producing lead ore in paying quantities. Dressing and emplifying lead are gaing on regularly. and smelting lead are going on regularly.

MR. E. J. BARTLETT, STOCK AND SHARE DEALER, No. 30, GREAT ST. HELEN'S, LONDON, E.C.

HOW AND WHEN TO DEFINE STREET INVEST."-

ZINC ORES.

ARMAND FALLIZE,
INGENIEUR-CIVIL, A LIEGE (BELGIUM),

1.-CARBONATED AND OXYDED ZINC ORES (CALAMINE, &c) 2.-ZINC AND LEAD ORES MIXED TOGETHER, BUT DRESS. ABLE KINDS ONLY

CAPPER PASS AND SON, BRISTOL PURCHASERS OF

LEAD ASHES, LEAD SLAGS, SULPHATE OF LEAD, HARD LEAD, BRASS SLAGS AND ASHES, COPPER REGULUS, MATTE, SCORIA, TIN ASHES, TERNE ASHES, &c., and MIXED ORES or REFUSE, containing LEAD, COPPER, TIN, or ANTIMONY.

ORE DRESSING.

MR. T. CURRIE GREGORY, C.E., F.G.S.,

AND MINING ENGINEER,
OF 4, WEST REGENT STREET, GLASGOW,
AND 52, QUEEN VICTORIA STREET, LONDON,

May be personally consulted in London on all matters connected with Ore Dressing and Rock Drills, to which he has for years paid

ecial attention.
Estimates given, and all kinds of Machinery supplied.

REPORTS AND SURVEYS OF ALL MINING PROPERTIES MADE.

Exhibition Prize Medal-New South Wales, 1877. AUSTRALIAN TIN-"KANGAROO" BRAND.

Having recently succeeded in REFINING the AUSTRALIAN TIN to the HIGHEST PITCH OF PURITY, the Undersigned is prepared to SUPPLY an article equal to the BEST REFINED ENGLISH.

The uniform assay of the "Kangaroo" brand ranges from 99.70 to 99.90 pure tin. An exhaustive comparative trial of various brands of Australian tin (see annexed report) have proved the

"KANGAROO" BRAND

To be superior to all other Australian tin, and equal to best refined English.

COPY OF REPORT.

"Sydney Galvanising Works, Sydney, Oct. 1, 1875."

"Dear Sir,—I bave much pleasure in stating that I have found the tin smelted at the 'Kangarco' Tin Emelting Works superior to any other Australian smelted tin I have used in my business up to the present time, and in no way inferior but quite equal to the celebrated 'Lamb and Flag' tin.

This opinion has been arrived at after several carefully executed practical tests, as well as from metallurgical assays.

"I am, dear Sir, yours faithfully,

"S. L. Bensusan, Esq."

Mesars JOHNSON MATTHEY AND CO. the well-known.

Messrs. JOHNSON, MATTHEY, AND CO., the well-known

Assayers, report on 24th December, 1875, on a shipment ex Durham, 25 tons of "KANGAROO" TIN, 99 95 per cent. pure tin.

In ordering the "Kangaroo" brand the trade will henceforth ensure uniformity of quality, excellence of texture, and absolute freedom from impurity "KANGAROO" TIN SMELTING WORKS.

Sydney, September, 1877. C. H. WALKER AND CO., MINING AGENTS AND ENGINEERS, VALPARAISO AND SAN IAGO,

S. L. BENSUSAN.

CHILE. GEO. G. BLACKWELL, 5, CHAPEL STREET, LIVERPOOL,

PURCHASER OF MANGANESE, ARSENIC, FLUOR-SPAR, WOLFRAM, BLENDE, CALA. MINE, CARBONATE and SULPHATE OF BAKYTES, ANTIMONY ORE, CHROME ORE, MAGNESITE, EMERY STONE, PUMICE STONE, OCHRES AND UMBERS, CHINA CLAY, LEAD ORE FOR POTTERS,

MINERALS WANTED.

A DVERTISER requires REGULAR CONSIGNMENTS of GOOD SULPHUR ORE (PYRITES), either cupreous or non-cupreous; also, GOOD BLENDE, and SOFT MANGANESE ORE. Address, "Pyrites," MINING JOURNAL Office, 26, Fleet-street, Lordon, E.C.

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Apply to Mr. JOHN POLKINGHORNE, PAR OFFICE, PAR STATION.

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25 Pandora, 17s. 6d.

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50 Tecoma, 5s. 9d.

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30 Van Consols, \$s. 9d.

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15 W. Wye Valley, £4.

30 West Pateley Bridge,

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40 W. Godolphin, £1 16s.

call paid.

20 Yorke Peninsu'a, 6s. 6

NOTICE OF NEW ADDRESS.

MR. BUDGE begs to inform his clients that he has REMOVED his BUSINESS from 4, Royal Exchange Buildings, to—No. 9, GRACECHURCH STREET, E.C., To which address all communications should be sent.

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Exchequer, Parys Mountain, Holmbush, Cakemore Colliery, Bodidris, Chicago,
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DIVIDENDS.—ADVANCING STOCKS SECURE INVEST-make 1s, RAILWAY SHARES, BONDS, &c. The season is now on to make large and rapid profits from small outlay. Two or three stocks should be bought with the certainty of doubling or trebling. Money advanced in one or two security.

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Notices to Gorrespondents.

• Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be flee on receipt: it then forms an accumulating useful work of reference.

OXIDE OF MANGANESE.—In reply to an enquiry in the Journal, we can give any information required as to Oxide of Manganese.—John MacQuiren and Son: Old Jecry Chambers.

STRAITS TIN—"A." (The Hague).—There are no books in English in which the matter is more than in-identally referred to; but any of the Amsterdam brokers could, no doubt, supply all the information desired. Probably the reports of the Handelsmastschapply would contain most of the particulars sought; also the Zeitschrift für Berg Hütten-und Salinenwesen, and perhaps the Oesterreich Zeitschrift für Berg und Hüttenwesen.

Zensenrit fur Berg und Huttenwesen.

ASBESTOS.—A "Constant Reader" would be glad to be informed by any of your numerous correspondents where Asbestos is obtainable in quantities?

BHAEE DEALING.—We never interfere in the sale or purchase of shares; neither do we recommend any particular mine for investment or speculation, or broker through whom business should be transacted. The addresses of most of the latter appear in our advertising columns.

latter appear in our advertising columns.

Received, "Empressario" (Maidanpek, Nov. 19)-"D. R." (Bristol)-"P. M. (Glasgow)-The letter of a "Holder of 300 Shares in the North Laxey Leat Mine" is too personal for publication; the writer should attend the next meeting, and state his opinions-"Shareholder" (Wheal Uny)-"Constant Reader (Glasgow): Next week-"L. B." (Plymouth)-"Shareholder" (Roman Gravels-"Shareholder" (Old Treburgett): Read a letter among the Original Correspondence-"Viator" (Dundee) should write to the Secretary, who will readily ferward the information.

THE MINING JOURNAL,

Bailway and Commercial Gazette.

LONDON, DECEMBER 1, 1877.

THE RATING OF METALLIFEROUS MINES.

THE RATING OF METALLIFEROUS MINES.

Since the Act for the rating of metalliferous mines came into operation it appears that different methods have been adopted in the various districts for arriving at the rateable value of every description of mining property. The consequence is that in some instances the rates appear to be very moderate in comparison with others. Not only is this the case but mines in any parish belonging to the Crown are exempt from the payment of rates. Thus we find that in the Derbyshire lead mining districts the amount of rates paid by the lesses of such mines is comparatively trifling, which is certainly a great advantage. Why, however, the mines belonging to the Crown should be exempt from rates we are not informed, nor can we see any substantial ground why they should be which is certainly a great advantage. Why, however, the mines belonging to the Crown should be exempt from rates we are not informed, nor can we see any substantial ground why they should be treated differently to those belonging to ordinary individuals. To our thinking all mines should be rated upon a uniform system on a simple principle, for as it is large sums of money are expended in obtaining the services of mining experts to determine the rateable value of mines of every description. The results, however, are so very unsatisfactory that appeals are constantly made to the law courts at a heavy cost to the appellants, and the conclusions arrived at by the valuers are frequently upset, but this is only effected at a serious loss to both sides. In some instances in the same county we find that the rateable value of the mines is fixed by making an allowance of 25 per cent. In respect to shaltage and fixed plant, and in others the rule is to take the estimated gross receipts, and deduct the estimated working expenses and allowance for tenant's capital. In estimating by these two opposite processes the results vary a great deal, so that one set of owners are rated much easier than others. This, of course, leads to frequent complaints, and Boards of Guardians having employed what they consider a competent valuer do not as a rule after the rate fixed by such a person unless compelled to do so by the force of law. What, then is required is a system that can be easily understood and carried out by the overseers themselves without the intervention of professional valuers. The Rating Act of 1874 is now adopted at most of the tin and other mines in Liskeard where the rate is made according to the mines in Liskeard where the rate is made according to the mine mines in Liskeard where the rate is made according to the mine mines in Liskeard where the rate is made according to the mines in Liskeard where the rate is made according to the mines in Liskeard where the rate is made according to the mines in Liskeard where the some mines in Liskeard where the rate is made according to the minimum rent paid to the landlord for the year ended the previous Dec. 31. The difference in the mode of rating of mines other than

coal is very great.

In Cornwall the ironstone mines in St. Colomb Major are assessed on the returns of ore sold, 15 per cent. in two instances being deducted for repairs to mine buildings, whilst at Truro no deductions whatever are made. With respect to copper, tin, and lead mines, in Liskeard the gross estimated rental is arrived at according to the dues on the ores sold, and this is the course adopted at the tin and copper streams which were rated before the passing of the Act of copper streams, which were rated before the passing of the Act of 1874. Cumberland is well known for its valuable hematite mines, those at Bootle being rated after a reduction has been made for rates, taxes, repairs, and insurance of buildings, whilst at Whitehaven a reduction of 25 per cent. is made in respect to shaftage, &c. In Devon there are ironstone, tin, and other mines, and in two instances the gross estimated rental is arrived at from the annual return 23 per cent.

In Devon there are ironstone, tin, and other mines, and in two instances the gross estimated rental is arrived at from the annual return, 33 per cent. on 80th for water-wheels being deducted to arrive at the rateable value. At most of the mines, however, no deductions are made from the gross estimated rental, which is arrived at in various ways. Some have been assessed on the mine dues, others on their minimum rent, and others again on what it was considered they would reasonably let at. At Totnes the rating is effected according to the rules laid down by section 7 of the Rating Act, 1874, applicable to the special circumstances of the case.

Durham, it appears, can only boat of one small lead mine, which is rated according to the amount of rent paid by the lessee, from which nothing is taken off. The ironstone mines, however, are rated upon 7d, per ton on the output of the previous year, from which an allowance of 5 per cent. Is made. This is very different from Lancashire, where the gross estimated rental (from which no deduction is made for determining the rateable value) is arrived at by taking 2s. 3d, per ton on ore raised, 2s, being for royally and 31, per ton for engines, tramways, and other appurtenances. This is the rule at Barrow-in Furness. At Ulverstone, however, there is no deduction from gross to rateable value, it having been agreed by the proprietors of the hematite mines and the assessment committee that the ores should be charged 2s. 34, per ton naised and disposed of. In Monmouth, in one instance the gross estimated rental is fixed at 6d, per ton per annum, from which 25 per cent. is deducted in making the rateable value; at some of the other mines in the same county the gross rental is 6d, per ton on the ore raised, from which no deduction, is made inestimating the rateable value. Northampton-hire has several ironstone mines in the Kett-ring and Towester districts; the former were valued by Mr. Hedley, whose system he does not make known, whilst the gross rental of the latter is according to the former were valued by Mr. HEDLEY, whose system he does not make known, whilst the gross rental of the latter is according to the royalty and surface value of the land. In Shropshire, the ironstone mines at Madeley are rated upon the returns of royalty or dead rent paid from which 2½ per cent. is taken off in fixing the rateable value, whilst the Lilleshall Company, at Newport, have agreed that the gross estimated ren'al should be assessed at 1425L, from which

10 per cent is taken off to arrive at the rateable value. The ironstone mines in Staffordshire are assessed in in some instances according to the quantity raised and the selling price, from the gross of which one-sixth is deducted, whilst in others one-tenth of the total value of the ore raised is fixed as the gross rental, from which one-fifth is allowed in naking the rateable values. There are sev-ral iron mines in Worestershire which appear to be rated the same as the collieries, the gross rental being on the basis of a royalty assumed by the assessor, for which deductions varying from 10 t. 20 we cost are made for arriving at the rateable value. from 10 to 20 per cent, are made for arriving at the reteable value. The iron-tone mines in Yorkshire are rated in several different ways. In the Leeds district the gross rental is taken at 10t, per man at some places, and at others according to the tons raised. In the North Riding the mines are rated at the tonnage price for which the mines would let. In South Wales, in Brecon, the gross rental of the ironstone mines is taken at 2s. per ton. In Glamorgan Mr. Heddley appears to have valued several of the mines. The lead mines in Mont-

gomeryshire have the gross rental reached by taking the total amount of daes and fixed rent, if any, payable, and in some instances the machinery, &c., are separately rented. The rateable value is the same as the gross rental, with some exceptions. From the figures and statements given above it will be seen how various and opposite are the modes of assessing our metalliferous mines, and the necessity for one general system.

LABOUR IN WALES.

LABOUR IN WALES.

Although some orders for rails are stated to have been received by several of the companies engaged in the manufacture of iron in South Wales, the general trade of that district appears to be in a deplorable condition, and the coal trade even seems to be going from bad to worse. The real cause of the troubles which now afflict Wales is, after all, the undocile, unreasonable attitude of the working classes of the Principality. If any proof were needed of this it is found in the fact that, although the Nant-y-Glo and Blaina Ironworks Company has been unable to give its shareholders any dividend for the last four years, or even to meet its debenture interest since June, 1876, the company's colliers have refused to accept any reduction of wages. The inevitable result has been that large numbers of them have been discharged, and have been reduced in consequence to great misery. This, however, is no consolation to the capitalists who have embarked their épargue in the utterly unprofitable Nant-y-Glo and Blaina Ironworks Company, which has been compelled from the force of adverse circumstances not only to suspend its production of iron, but also to greatly curtail its extraction of coal. Labour was defined by Adam Smith to be the source of all wealth; but disorderly, insubordinate, uncontrollable, unreasonable labour is not only not a source of wealth, but must infallibly be attended with loss to those who are weak enough to attempt to employ it.

employ it.

In all directions we hear of stagnant trade, and we are naturally disposed to ask what are the causes of this almost unprecedented stagnation. These causes appear to us to be manifold. First of all there is and has been a sad waste of wealth in consequence of the bloated armaments unfortunately maintained by the principal nations of Europe. These bloated armaments not only involve a sad waste of wealth in themselves, but they are also productive of the waste or weath in themselves, but they are also productly of the still greater evil of sanguinary and exhausting wars. One of these wars is now being waged between Russia and Turkey, and this war, which is from every point of view a most miserable business, has undoubtedly helped to intensify and even to prolong the extra-ordinary depression which has for so many weary months weighed down European industry. The second cause of the remarkable stagnation of the times is the collapse of imaginary credit. Turkey has not been borrowing for legitimate purposes ever since she began to borrow in 1854. She has borrowed to gratify the pleasures of vicious Sultans, to enable her so-called Government to build costly vicious Sultans, to enable her so-called Government to build costly ironclads, and to maintain an army disproportioned to the requirements and resources of the nation; but she has not borrowed—at any rate, to any serious or important extent—for the solid benefit of her population. The consequence has been that she has succumbed at last to a long series of crushing deficits, and her imaginary credit is now represented by a huge mass of unpaid coupons. It may be said that Turkey is a very severe illustration of our argument, but other countries have, unfortunately, also developed a policy of imaginary credit to a greater or less extent, and the result has been that hundreds of millions of good English money are now altogether unproductive of interest, while other Governmental bonds upon which interest is still paid are in rather a ricketty condition. altogether unproductive of interest, while other Governmental bonds upon which interest is still paid are in rather a ricketty condition. This collapse of imaginary credit has, of course, a most serious influence upon enterprise of all kinds, and even upon enterprise of a really legitimate character. But the third and greatest cause of our existing business difficulties is undoubtedly the undocile, untractable attitude of the working classes. Jack now considers himself as good as his master, and perhaps a good deal better. But while capital is bound to assume a kind and considerate attitude towards labour, and to accord it the largest possible remuneration, labour must be the servant—the docile, willing, obliging servant—of capital. This is the only union of labour and capital which can be attended with really profitable and useful results. It is, perhaps, a hard lesson to learn this, but it must be learnt in this England of ours, otherwise we shall-continue to have Oxford professors lecturing upon our decadence as an industrial nation. our decadence as an industrial nation.

MINERS, AND THEIR RIGHTS.

MINERS, AND THEIR RIGHTS.

The very important question as to whether miners have the power legally to restrict the production of a colliery at which they are employed, and so become the masters of its commercial character, was brought under the notice of the Barns'ey Bench of Magistrates on Friday, the 23rd ult. The issues were clear, definite, and in no way disputed by the defendants. Acting on the advice of Mr. Macdonald, taking counsel with the executive of the Miners' Association, to which they belong, determined to only get a certain quantity of coal daily. Having carried out that object for several days, 125 of them were summoned for a breach of contract under the Employers and Workmens Act, seeing that they did not carry out the terms of the agreement entered into by them with the owners of the colliery at the time they were engaged, and compensation for loss in each case was claimed. On behalf of the defendants it was argued by their counsel that the contract entered into by them with their employers was void, seeing that there was no obligation on the part of the plaintiffs to find, work for the men. The contract, therefore, was void, he contended, for want of mutuality, and in support of that proposition he quoted a well-known Sheffield case—Sykes v. Dikon—in which the defendants signed an agreement to work for the plaintiff, but to give him 12 months' notice before leaving. That contract was held by the judges to be void for want of mutuality. The present case, it was pointed out, was entirely different from that, for the men, if dissatisfied with their position, could leave on giving 14 days' notice, whilst there were special terms in the agreements made with the men at Lund Hill with regard to their daily work, and the objection was at once over-ruled. To us it appears to be a monstrous proposition that a man can occupy a certain working place, that machinery, hores, and labour-rs shall be attending upon him at a heavy cost daily over-ruled. To us it appears to be a monstrous proposition that a man can occupy a certain working place, that machinery, horses, and labourers shall be attending upon him at a heavy cost daily for the purpose of aiding him in performing certain duties, and that he can either work or play, just as he plea-ed, without in any way being accountable to his employers. If such were the law, then a body of men, by so acting, would be able in a very short time to ruin almost any of our colliery owners. But we believe, with the Barnsley magistates, that by no stretch of special pleading can such a doctrine be held by any of our judges, or was ever intended by the members of our Legislature—excepting, indeed, in the person of one member of that distinguished body could such an absurdity be entertained. As we have on several occasions pointed out, working men are not apprentices, and when dissatisfied with an employer they have only to give the legal notice and go elsewhere. But at they have only to give the legal notice and go elsewhere. But at Lund Hill the men agreed not to work themselves, and, consequently, by occupying their places would not allow others to do so. Were it not a serious matter for the owners, one could almost

Were it not a serious matter for the owners, one could almost smile at the absurdity of a number of ignorant men assuming such powers as to tell their employers that they should serve such and such customers only with such a quantity of coal as met their views. This is the correct reading of the action taken by the men, and would have been carried out for an indefinite period had they been allowed their own way. In the one case partly heard, it was stated that the man Whittfield could get from 6 to 8 tons of coal per day—6 tons, in fact, being a very easy day's work—and in one week he got as much as 55 tons, but on the 9th ult. in carrying out the principle of restriction he was only credited with 84 cwts. This of principle of restriction he was only credited with 84 cwts. This of course became a serious matter to the owner of the colliery, so that were the same plan carried out generally there would be a very were the same plan carried out generally there would be a very heavy loss indeed. This was shown in a variety of ways; amongst others it was proved that the cost of drawing 4000 tons—about a week's work—was 2s. 8\frac{3}{2}d. per ton. and the necessary machinery, and appliances have to be kept for raising that quantity

whether the men worked or not. But that they are obliged to do a fair day's work, in opposition to the views of Mr. Macdonath we think does not admit of the slightest doubt, and to ensure this we think does not admit of the slightest doubt, and to ensure his collery-owners have made the agreements between them and their employees as binding as they can be made. At Lund Hill, as well as other coal mines, the men on being eng god either sign their names in a book kept for the purpose, and duly witnessed, or make their mark. In addition to that they have a copy of the rules and byelaws delivered to them for their future guidance, and which agree to be bound by and carry out. In the 8th bye-law relating to Lund Hill it is stated that "Every workman will be required to perform a fair day's work on each and every working day, except when prevented by illness, or exempt by special consent in wriding from the manager or underviewer." If such a rule is not sufficiently strong and binding, and opposed to anything in the shape of restrictions. when prevented by inderviewer." If such a rule is not sufficiently strong and binding, and opposed to anything in the shape of restriction, we cannot see how words can be framed to make it more so. Nor can we see how the most astute counsel can get over a law evidently framed by a legal authority, and one of the owners of Lund Hill has a reputation as a lawyer second to none in the district. That the men will have to pay compensation for the loss sustained by their employers we believe there is not the slightest doubt, so that the men will have gained experience by paying for it, and be taught how dangerous it is to place the slightest confidence in the pernicious counsels with respect to their rights and privileges even when they emanate from one who is a member of the Legislature.

Manchester Geological Society.—The monthly meeting of members was held on Tuesday, when Mr. W. J. Grim-haw Presided, in the absence of Prof. Boyd Dawkins.—Mr. J. E. Forbes, one of the honorary secretaries, read a letter from the Registrar of the Owens College, enclosing a copy of the regulations which the Council have made for the admission of students and the public to the geological collections.—Mr. C. E. De Rance, F. G. S., of Her Majesty's Geological Survey, was unanimously elected an honorary member of the Society, and Mr. T. Livesey, Jun., of Hatherlow, was elected an ordinary member.—Mr. J. S. Martin, one of the honorary secretaries, read a short paper on the occurrence of a fossil spider architaries, read a short paper on the occurrence of a fossil spider architaries, psy Mr. D. Morris, F.G.S., with regard to which Mr. Forbes stated that the discoverer (who is at present in C. ylon) had promised a full description for the Society's Transpections at an early date, Mr. Martin also read a paper, communicated by Mr. G. H. Kinahan, M.R.I.A., on Quartzite Rocks.

MINING IN THE ISLE OF MAN.—We learn that the Manx Silver-lead (the Ohio) Mine, in the parish of Bildwin, is looking exceedingly well. A rare discovery in the vein in the 70 has been made, and it is stated that the returns will not be less than 25 tons per month. The liveliest satisfaction is evinced in this discovery, and month. The liveliest satisfaction is evinced in this discovery, and hopes are expressed that a new career has been opened for the young mine here. The provisional directors of the Langness Mining Company have failed to float, and have returned the deposit money to the applicants for shares, with 5 per cent. Their honourable conduct has given great satisfaction, and it justifies what we stated in the Journal that few mines had been placed before the public more honestly, or with greater prospects of success. The adventurers are actively developing their property. The engine-shaft is down mearly 40 fms., and on Monday they commenced driving to the veins. The property is looking exceedingly well, and large discoveries are looked for in the course of a month or six weeks.

Pig-Iron.—Exports during the ten months ended Oct. 31: Year. Toos. Self-ris during the ten months ended Or Year. Value. Ave. 1875. 806,706 £2,977,308 ... 1876. 769,815 2,406,342 ... 1877. 758,127 2,180 449 ...

THE ANTHRACITE COAL TRADE.—A letter in a contemporary states that "the main causes which have prevented anthracite coal from taking the very first position in the lank of steam generating fuel have been, to a very great exteut, overcome by the use of 'Korting's Steam Jet Undergrate Blower, and hollow fire-bars manufactured by Mr. T. W. Williams, Wellington Foundry, Swansea." The writer has in his possession a letter from a respectable firm in Swansea where these appliances have been in daily use over nine months, with the following important results, as compared with their previous experience of ordinary steam coals:—I. A saving of 25 per cent, in fuel.—2. 50 per cent, more steam produced.—3. The labour in stoking reduced to one half,—4. 75 per cent, less ashes.—5. Perfect freedom from smoke.—6. Fire-bars and blowers as perfect as they were when first fixed, about nine months ago.—T. L. Davies, Henthfield-place, Swansea.

Coal and Iron in the United States.—There has been acontinued steady demand for all the leading makes of steel at Pittsburg, manufacturers appear busy, and it is expected that this will continue to be the case during the remainder of the year. The demand for wrought-pipe has been active at Pittsburgh for some time past; the National Tubeworks recently shipped 172 carloads in nine days. As regards scrap-iron, old rulls have been somewhat firmer at Pittsburgh, but prices remain about as last quoted. There has been rather more activity in coke in the Pittsburgh district; as regards coal, the miners at a meeting at McKeesport last week fixed the price for mining at 3 cents per bushel. Whether the employers will agree to pay the rate thus demanded remains to be seen; in some respects, however, the situation is favourable to the minera, as stocks in most of the western and southern markets are light, and prices have been advanced. Messrs. W. Cramp and Sins, of Philadelphia, have just closed a contract with the Pacific Coast Navigation Company for a large steamer for service between San Francisco and Portland, Oregon. The steamer will be 360 ft. in length, 36 ft. 6 in. beam, and 28 ft. depth of hold, and she will be fitted with regimes of 1800 horse power indicated. The aggregate production of anthracite and bituminous coal in Pennsylvania to Oct. 27 this year amounted to 18.971, 247 tons, as compared with 17,514,065 this in the corresponding service of 1876. COAL AND IRON IN THE UNITED STATES. There has been a conyear amounted to 18.971.247 tons, as compared with 17,514,065 tons in the corresponding period of 1876.

MOULDS FOR CONCRETE BLOCKS .- The invention of Mr. J. C. Sellars, of Birkenhead, relates to moulds and frames to be used in the formation of concrete blocks and structures, and has for it object to ensure that the concrete shall not adhere to the surfaces such moulds or frames, and hence the surfaces shall present a smooth, neat, and finished appearance. Under the first part of his invention he makes the moulds of paraffine or similar wax-like substance, unacted upon by alkaline matter, mixed with sand, charcoal, or other finely divided material. In some cases paraffine alone may be used. These moulds are suitable for forming ornamental blocks, or blocks of various patterns used in building operations, of which a large number is not required. If it is desired to obtain a very smooth surface a stream of hot air or steam may be passed over the surface of the moulds of rames of timber, metal, or rigid material, the surfaces of which are coated with paraffine or other wax-like sub-ELLARS, of Birkenhead, relates to moulds and frames to be used ne forms monds or frames of timber, metal, or rigid materid the surfaces of which are coated with parafine or other wax-like substance, either with or without admixture with sand, charcoal, or other finely divided material. Under the third part he forms the mould of a rigid material, and covers the surfaces with lac, matic, or other varnish. Under the fourth part he forms the moulds of metal, and japans or enamels the surfaces.

MAGNETIC SAFETY-LAMP.—The improvement in miners' safety lamps invented by Mr. J. B. Closson, of Paris, has reference to the construction of the fastening mechanism, so that the rad or pin which, with other parts is enclosed, is in a suitable box, and is by a spring caused to enter a recess in the upper or removable part of the lantern for locking; it is for unlocking depressed mechanically by a partial turn of the said upper or removable part in the sand duretion as for depict the said species and said set the said s direction as for closing the said rod or pin, after having been so de

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past they ought to get, but still it is suitsfactory to observe an imporement. One of the most practic il les-sons taught at the Muning isstitute Exhibition was the nece-sity of looking well to the water ped in steam boilers, as proved by the remarkable case of boiler incrutations there exhibited. The fouler a boiler, of course, the greater the loss of power.

Probably before long we shall have more definite information on the extent and character of the distress from which the mioring districts of the county have been alloged to be suffering, but which we have always held to be grossly, if inno-ently because ign-randty, esggerated. Mr. T. S. Bolitho has revived the old County Relief Committee, which has a considerable balance—over 1000L—in hand, and meeting was held at Truro on Monday. Distress in any formanot be deemed a pleasing subject, or it would have been amuning 5 hear the immense variety of opinions expressed as to the distress, techaracter, and extent, ranging shoot from the view that there is the control of the county or out of it, to the warmly expressed conviction that on the county or out of it, to the warmly expressed conviction that ommittee adopted what will be more generally concelled to be a vivise course. They resolved upon making in lependent enquiry is to the adopted what will be more generally concelled to be a vivise course. They resolved upon making in lependent enquiry is to the surface of the times more are not those who are the loudest in their outcries have it is every clear likewise that those who feel the pinch of the times more are not strong the surface of the times more are not those who are the loudest in their outcries about it of every clear likewise that those who feel the pinch of the times more are not the Stannaries has had an important question of minure practically acquired with the more without turning it into an appeal, after the Indian famine fashon, and it is every clear likewise the precenting and the material of the county is quite sufficient and able to deal wit

As it is, Silkstones are delivered to the collars of consumers at from 23, to 24s, per ton. The Midland is also taking Silkstones from Darbyshire westward as far as Bristol and Bath. Steam coal, how-wer, is not in such request as it has been, whilst there has been no improvement with respect to engine fuel and small coal generally.

meanically moved, thus learing the upper or removable part free means a master wed and removed. The essential improvement consists to bringing the magnate within the lamp closer to the casing, as to ensure the operation of the unlocking magnet; otherwise is the missing the magnate within the lamp closer to the casing, as to ensure the operation of the unlocking magnet; otherwise is the missing the magnate within the lamp closer to the casing, as the search of the control of the magnetic part of the kind of the control of the

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

Nov. 29—There is no alteration calling for note upon the week in the coal or iron trades of either the northern or the southern portion of the county. Domestic fuel is in improved and improving demand. Pig-iron is strengthened by the action of North of England makers. The work at the mills and forges is under the average.

demand. Pig-iron is strengthened by the action of North of England makers. The work at the mills and forges is under the average. Best iron is most sought after.

A private conference has been held between the Chairman and the secretary of the Iron Trade Arbitration Board, the operatives' secretary, and the Vice-Chairman of the board, to consider the advisability of extending the operations of the b and to North Staf ordshire and to Shropshire, and of making efforts to secure the cooperation of those employers and workmen who at present stand aloof. Nothing very definits has yet been resolved upon, but the first move will, it is believed, come from the men.

The most prominent feature of the stock market this week is in connection with the Cannock and Huntington Colliery Company (Limited). The 10t. shares of this concern have been bought for 2t, and sellers now remain at 7th dis., buyers at 8 dis. A week or so ago a call of 2t. was paid upon this property. Other colliery shares show no conspicuous alteration, and are dull. Iron companies' property is even less active than that of mining concerns.

Important presentions under the Mines Regulation Act were brought by Mr. J. P. Biker, Government Inspector for this district, before the Sedgley magistrates on Monday. On August 24 two stakers were killed at the Moat Colliery, Tipton, by being precipitated to the bottom of the shaft as they were being drawn up, through an alleged defect in the brake. A coroner's jury returned a verdict of manslaughter against Mr. Elijah Davies (the manager), the colliery engineer, the engine tenter, and another person connected with the colliery, but the bills were ignored by the Grand Jury, and the defendants were acquitted. On Monday Mr. Davies was charged with three breaches of the Act, and the other three persons implicated were between them charged with eight offences. The case against Mr. Davies was heard, and his counsel took three objections to a conviction.—I. That the summonses had not been issued within the required three m higher court was appoint for, but the Bench upon this point reserved their determination.

Two other fatal accidents through falls of coal have occurred at

Two other latal accidents through falls of coal have occurred at Dudley. Since my last a bandsman has been killed, and three other men only narrowly escaped through a heavy fall of coal in Earl Dudley's 28 Saltwell's Colliery, Darby end, and a pikeman has been killed, another pikeman has been injured, and two other men had narrow escapes through the fall of some 7 or 8 tons of coal at the Grace Mary New Colliery (of Messrs, Minton) when a tree was being ramoved.

arrow escapes through the fall of sum 7 or 8 tons of coal at the Grace Mary New Colliery (of Messrs. Minton) when a tree was being the hoteless, Mr. Brough the fall of sum 7 or 8 tons of coal at the Grace Mary New Colliery (of Messrs. Minton) when a tree was being the hoteless, Mr. Brough the fall of sum 6 or or 8 tons of coal at the Grace Mary New Colliery (of Messrs. Minton) when a tree was being of the work of the collier season in the same than the season in the season

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TRADE OF THE TYNE AND WEAR.

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TRADE OF THE TYNE AND WEAR.

Nov. 29.—The shipments of bouse coal have only been moderate lately, the mild winter having evidently had the effect of reducing the demand. Shipments of gas coal and coke, &c., have been large, especially at the Tyne Docks. Cargoes of gas coal continue to be ent to America in spite of the import duty charged. In Darham the miners are in some cases working full time, but the majority are anly employed about from four to five days per week. The Tenndon Golliery has been got to work again, the cause of the stoppeg having been financial difficulties into which the late company had fallen. The works have now been stated by the original propretor—Ir. Wood. Another colliery has been stopped near Tow Latendary and the company had fallen. The works in Darham, but great numbers of men are to be seen daily in search of work. The coke trade is pretty firm at late rate, and there is no change in quotation. The period lical returns of the accountants appointed by the Darham Coulowarts' Association and the Darham Mines Association have again been made; they give the selling price of coal in the country; they find the result to be that the average selling price of coal per ton for the four months closing October—that is of all the coal brought to bank in the associate collieries—is 5z. 23d, per ton, thus showing a decrease of 1d, per ton since the investigation four months previously; this is, of course, a decrease, but miners' were being at the lowest fine, of course, a decrease, but miners' were being at the lowest fine, of course, a decrease, but miners' were being at the lowest fine, of course, a decrease, but miners, and the court of the court of

REPORT FROM NORTH WALES, SALOP, AND CARDIGAN.

Nov. 28.—I noticed in a former report the stagnation in the trade in fluxing limestone, owing to the great depression in the iron trade. The trade in agricultural lime has been equally bad this last year. Scarcely a fourth of the usual quantity of lime has been used on the land these two years. The cause for this is to be found in the scarcity of money among farmers, owing to a succession of harvests below the average. A steady little trade is being done near the town of Holywell in the manufacture of coments and hydraulic lime from the black beds at the summit of the limestone of that neighbourhood. A good deal of coal from South Wales fine's its way into the district for lime burning in ordinary times, but of late sellers find it difficult to obtain orders sufficient to cover their expenses.

sellers find it difficult to obtain orders sufficient to cover their expenses.

Operations at the Great Holway Mine were begun on Monday under the auspices of the new company. Roskell's shaft is to be sunk 80 yards below the adit level, at which depth it is expected it will strike the lode in the limestone beds. The old workings above the adit were for the most part in the chert beds of the millstone grit. Powerful pumping machinery is to be erected, as the ground below the adit is full of water. Other works are in contemplation by which the water which has been dammed up in some of the upper workings is to be released, and some good ore set free. On the occasion of a recent visit I found some of these shallow workings let at double royalty to a few miners, who make a living by raising ore on their own account. The Gorseld and Merllyn Mines have a good quantity of ore dressed and in the course of dressing. Thirly miners and twelve dressers passed 450 tons through their hands last month without machinery. The absence of machinery is a noticeable feature in the principal paying lead mines of Flintshire. At North Hendre the lumps of ore are hand-dressed, and sold whole for potters' use. At Gorsedd all the ore is hand-broken and jügged on account of the silver contained.

Mr. Whalley, M.P. for Peterborough, is the defendant in a lawsuit which is being tried as I wayte activated.

on account of the silver contained.

Mr. Whalley, M.P. for Peterborough, is the defendant in a lawsuit which is being tried as I write, and which I may notice next week. The honourable gentleman is the owner of considerable mineral property in the neighbourhood of Rusbon. A stone quarry in the mill-The prosecution for intimidation arising out of the North Staffordshire strike, to which I last week referred, has resulted in two colliers being find each 54 and costs.

A simple and handy contrivance called the Gradometer has been made to answer the same purpose as a clinometer in measuring the angles of inclines, the dip of strata, gradient of roads, &c. The gradometer, however, shows more than a clinometer. To an ordinary spirit level a slide rule is attached, which when not in use lies in a groove in the plane of the level, but when used is placed in a vertical position at the end of the level, this slide rule is the same length as the level, and is graduated on one side with 36 equiliparts, showing the gradient in inches per yard, and on the other corresponding inclination in degrees of the quadrant. Thus, without the use of either plumb-line or circular arc, this instrument will show at a glance the gradient of any place which forms an angle

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The old lead mine at Llangynog makes steady returns of ore, and dressing-floors, with tramways and incline, are nearly completed at the Cwmdrog Lead Mine. An effort is being made to work the Phosphate Mine above this village more vigorously, and on a larger scale than hitherto. This step is said to be justified by the fact that the percentage of phosphate of lime has recently been brought up to 51½ per cent., and the mineral is comparatively free from the deleterious ingredients of oxide of iron and alumina. The whole neighbourhood of L'angynog only wants tramway accommodation to become a very important mineral district.

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The greenstone (commonly called granite) paving sett trade of Canarvonshire is good. Several new quarries have recently been opened up near Portmadoc; one on Moel-y-Gest has sent off several cargoe. The Queen's Quarry at Penmorfa, opposite the last, is laid out for a large production, and its tramways and incline connecting it with the Gorsedda and Portmadoc Junction Railway are completed, and it has delivered its first oargo of setts. The quarry is the property of a private gentleman—Mr. Hutchbury, F.G.S., M.E., of Bristol. The stone of this neighbourhood is rougher and better adapted for paving than the slippery stones of Penmaen and Clee Hills. It has little carbonate of lime, and it resists pressure. There is little to report of the lead mines of Cardiganshire, excepting that expectation is on the qui vive for results from the Cambii in Mines.

A series of scientific lectures are now being delivered by eminent scientific men in the old City of Chester, at which the audience number from 400 to 500 persons. A similar series of less pretension is also being delivered at Wrexhaun, in the centre of the North Wales mining district, which is also well attended. It is to be hoped, therefore, that the indifference shown for the most part by miners to the scientific and theoretic side of their important business is passing away.

ness is passing away.

REPORT FROM THE NORTH OF ENGLAND.

REPORT FROM THE NORTH OF ENGLAND.

Nov. 29.—Makers of pig-iron in the Cleveland district continue to a there to the rates resolved upon last week, having held another meeting on Monday to confirm their former agreement. Hence it has been difficult to purchase large parcels of iron for anything less than the regulation rates of 41s. for No. 3, and 40s. for No. 4 forge, less 1 per cent. It transpired on Tuesday that transactions had been effected on 'Change at less than these rates, owing to merchants wishing to diminish the stocks that some of them now hold, but the quantity of iron thus available must be very limited, insamuch as the whole of the stock in warrant stores does not much exceed 30,000 trus, and the largest stocks at works are held by makers who are parties to the new arrangement.

Fin ling it impossible to dispose of the Whessoe Ironworks at Darlington as a whole, the trustees of Mr. Thos. Vaughan decided to dismantle the premises, and expose to auction the whole of the plant and machinery. The sale came off on Wednesday of this week, and fairly good prices were obtained for most of the tools, a roll-turner's lathe with vertical engine selling for 864, a pug mill with engine for 424, a travelling crane for 324. a punching machine for 304, a six-wheeled coupled locomotive engine, with 12-in. outside cylinders, and weighing 20 tons with tanks and tender, was sold to a Miledsborough dealer for 454. This is said to have been the fifth becomotive made and run on the Stockton and Darlington Railway, the oblest in the kingdom, so that it must now be one of the most ancient in existence.

The Test Commissioners have made certain important concessions the most ancient in existence

the most ancient in existence.

The Tees C manissioners have made certain important concessions to the tralers on that river, but not yet sufficient to secure their consent to the application about to be made to Parliament for increase I berrowing powers. The Commissioners intended originally to obtain powers to berrow a further sum of 350,000L, but they are now willing to reduce that amount to 100,000L, which they maintain to be absolutely essential to enable them to keep up the improvement of the river. They have thrown other "sops to Cerberus" by reducing the duty on steel rails from 6d to 4d, per ton, and on coal and coke from 2d, to 1d, per ton, but still the traders are not satisfied, and have resolved accordingly at a meeting held this week.

It has been ascertained by the accountants appointed to carry out It has been ascertained by the accountants appointed to carry out the provisions of the sliding scale for the regulation of wages in the Durham coal trade that the total quantity of coal brought to bank by the associated coal owners in the county during the last four months only averaged 5s. 2\frac{3}{2}d, per ton, being a decline of 1d. per ton on the averaged realised selling price of the previous four months. A:, however, the wages of the miners have already touched the minimum point allowed by the sliding scale, there will be no alteration in the rate of wages.

FOREIGN MINING AND METALLURGY.

The sight increase of activity noticed in some of the Belgian mechanical construction establishments by reason of war orders appears to have died away, and it is now generally admitted that the rolling-mills and workshops are in a position to undertake serious engagements. It must not be inferred from this observation that the various establishments absolutely want employment, but their production is only engaged for a short period in advance. Small contracts for iron with immediate delivery are more than ever the order of the day in Belgium. This is probable attributable to the fact that intermediaries have comparatively small stocks of iron on hand. Upon the whole, the general situation may be said to have become somewhat firmer, but it would probably be wrong to regard it as very solidly established, prices being the subject of a good deal of discussion. Cupt. Eads, the American engineer who has acquired considerable reputation in connection with the improvement of the Missisippi, is maturing a project for the construction of a bridge over the Bosphorus between Peraand the Asiatic Coast. The length of the proposed bridge would be 6000 ft., and it would have 15 arches, one 745 ft. in length. The cost of this great bridge is estimated at from 3,000,000. to 5,000,000. Contracts are about to be let at Breslau by the Upper Silesian Railway for 25 goods engines and 10 locomotive teniers. Another contract is about to be let at Dresden for 100 baggage vans for the State railways. The John Cockerill Company has published an intimation to the effect that it has never abandoned the ilea of leasing the Hungarian State works at Giosgior, for the simple reason that it never entertained it.

Stocks of coal have been rather increasing at some points in France in consequence of the exceptional mildness of the winter; but these stocks will be soon disposed of and reduced as soon as cold weather sets in. Nevertheless, freights have temporarily given way. A summary of the statistics of 1873, 1874, and 1875 shall appear in the c The s'ight increase of activity noticed in some of the Belgian me

tion of 1878 are now nearly finished, and no further demand of any importance can be anticipated on this head. The week may be said to have been throughout one of expectation; some small contracts have been reported, but they have been scarcely of sufficient importance to call for notice or mention. Prices have remained at about the same level; in the Nord they have, perhaps, exhibited a slight tendency to feebleness. In the Meurthe-et-Moselle refining pig has brought 21.94,64, to 21.104,64, per ton. The question of the contraction of further cheap railways in France appears to be occupying some attention. cupying some attention.

The further we advance into the winter the less there appears to be to report with reference to the Belgian coal trade, which remains in a feeble condition as regards both sales and price. One cause for this state of things appears to be the fact that winter supplies have been laid in, while the winter itself has not made its appearance at present. Stocks are again accumulating, although the ex-

NEW HAND-POWER ROCK DRILL.



It has constantly been remarked that one of the principal reasons that rock drills have not been generally introduced in mines is that the large cost of air-compressing machinery more than counterpalances any advantage that would otherwise result from their use, and there are the results from the rock. the large cost of an-compressing machinery more than counter-balances any advantage that would otherwise result from their use, and there can be no doubt that where only one or two drills are required there is much to justify the statement. It was to meet this difficulty that the hand-power rock drill was designed by Messrs. I. B. Jordan and Son, and for simplicity it leaves little to be desired. Steam-power and expensive machinery are, of course, dispensed with, and the drill appears unlikely to get out of order, except from absolute wear. The drill will afford a ready and convenient means of drilling blast holes in many cases where the ordinary rock drill would be altogether inadmissible, and will give a considerably higher speed than hand boring, while avoiding the heavy outlay requisite in the application of power drilling plant driven by steam or compressed air, as well as the necessary staff of skilled labour. The chief advantages of the hand-power drill are that it is complete in itself, the total cost being but a fraction when compared with other plant now in use for the same purpose. It occupies but small space, requires no external connection, and may, therefore, be moved from place to place, and at once used in any situation large enough to contain it. The wear and tear to the machine is very slight, no skilled labour is required to work it, and holes can be bored at any angle to any required depth. The power cylinder is fitted with a piston and tubular rod of steel, which works freely through the long glands at the top and bottom of the cylinder. The top gland contains a cup leather packing round the piston rod, which prevents any escape of air contained in the cylinder. The piston is slightly cupped on its upper surface, and is packed on this surface only with a disc of leather, which is of greater diameter than the cylinder, so that when it is pressed down into the cupped surface of the piston by a nut of proper form, which screws on the piston-rod, its edges turn up against the cylinder, and form and there can be no doubt that where only one or two drills are re

order to embrace the driving nut, the lower end of which revolves in it as a thrust bearing; this nut is screwed through its entire length of 8 inches to fit the screwed portion of the steel bar, which passes through the centre of the machine, and carries the boring tool at its lower end. The drill bar is screwed for about half its length, and the other or lower half is six-sided, and passes through a cap of similar form at the lower end of the tubular piston-rod, so that it must turn with the piston, while having in lepen lent longitudinal motion through its centre; a somewhat similar arrangement admits of the long driving nut, either turning with the drill-bar or stopping on it, while it is always at liberty to travel through the bevel wheel, which gears it with the feeding handle. The requisite motion is given to the drill-rod by two cams on the wheel shaft, and this is effected by men at the winch handle, who can thus readily give 150 to 180 blows per minute, which, of course, far exceed both in number and weight anything that is possible by the u-ual process of hand drilling.

The machines are mounted on three different kinds of stands suitable for driving, sinking, and open quarry work, and the operation of drilling with them is so simple that we think the following few words will fully explain their action:—The machine having been fixed, and the tool brought to bear on the rock, the wheels are set in motion, and the cams thereby brought in contact with the lifting block, and it, together with the piston and drill bar, is raised 4 in. (the stroke of the machine), and instantly released to give the blow, the force of which can be regulated to suit the power of the two men working the machine. The action of the cams on the lifting block not only raises it, but also turns it a little, and thus gives the tool a new position for the following blow, and at the same time automatically advances the drill, the amount of which feed is regulated by a small brake at the back of the feed handle, which either stops or retards the rotative motion of the long nut on the drill bar. It will be seen, therefore, that the whole force of the blow is developed on the rock, and that at any moment the tool may be rapidly advanced or drawn back by hand, or easily regulated to suit any description

On Wednesday a series of trials were made for showing the actual capabilities of the machine in the presence of a number of gentlemen interested in the question of mining and quarrying, and satisfactory results were obtained. With machines adapted to give a 100-lb, blow, two men were able to maintain a fairly uniform speed bouth Caradou 940 4946 10 0 Bestlord United 90 212 5 0 800th Caradou 940 4946 10 0 Bestlord United 90 205 5 0 of from 180 to 185 strokes per minute, and making vertical hole the speed of boring was in three separate trials in hard Portland stone 6½ in, per minute, and in a very tough granite an average of 3 in, per minute was attained. In both cases an S shaped drill was employed, and the sizes were in the case of the Portland stone 1½ in. diameter, and in the granite 13. An attempt was made to show the operation of the drill in boring horizontal holes, but as there were no facilities for tightly fixing either the stone or the apparatus, the trial cannot be called a fair one for the drill.

This difficulty, of course, would not occur in the mine, where the apparatus would readily be made fast to the roof and floor, and there would be the solid heading to operate upon. The patentee states that, as a matter of fact, the loss in driving horizontally as states that, as a matter of fact, the loss in Griving norizontally as compared with making vertical holes seldom exceeds 10 per cent, and never reaches 15 per cent,, so that 2½ in per minute in the granite tested could fairly be relied upon. This machine is being introduced by the Hand-Power Rock Drill Company (Limited), of Queen Victoria-street, and there can be no doubt that for quarrying operations it will be admirable, and its use prove equally advanged. tageous to the workmen and to the employer.

___ Owing to a pressure on our space, we are compelled to smit "The Week The Scotch Mining Share Market." COLLIERY MANAGER WANTED

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WANTED, for a LARGE COLLIERY in YORKSHIRE, a COMMERCIAL MANAGER. No one need apply who has not had arge experience in the business, and can give the highest references Address, "A. D.," care of Mr. Watson, Advertising Contractor, No. 74, Fleetstreet, E.C.

TO MINING COMPANIES.

WANTED,—A MINE MANAGER, of large Foreign and Colonial experience in Gold, Silver, Iron. &c., and Phosphates, desires a SITUATION as MANAGER, or to INSPECT FOREIGN MINING of REDUCTION PROPERTIES. Is thoroughly up in the reduction of the Base Metal Ores of the Pacific Slope, and the erection of the necessary plant.

For testimonials and reference, address, in first instance, to 'Cosmo," MINING JOURNAL Office, 26, Fleet street, London, E.C.

WANTED,—A CORNISHMAN, at present Resident Manager of a large COPPER MINING and SMELTING E-TABLISHMENT, will be OPEN to a RE-ENGAGEMENT in December. Speaks and writes French and German, and has some knowledge of Spanish. Unexceptionable references, Address, "A. F. C. E.," Elisabetha Goldbergban, Oravicsa, Banat, Hungary.

WANTED.—An ENGAGEMENT by a MINING ENGINEER
as SUPERINTENDENT or GENERAL MANAGER. Speaks French,
Italian, and Spanish. Has had 25 years' experience in Argentiferous Copper and
Lead, Bitumen and its products, Sulphur, Silver, and especially Gold Mining,
Address, "X. Y.," 34, Spring street, Paddington.

TIN DRESSING.

The above is new, and never used. Will be SOLD CHEAP.

Also, an excellent 6 ton WEIGHBRIDGE.

Apply to Capt. HOSKING, Wheal Agar, Pool, near Camborne.

WESTMINSTER MINE (LATE LLANARMON), NEAR MOLD

NEAR MOLD.

POR SALE, the WHOLE of the PLANT, comprising ONE
22 in. PUMPING and WINDING ENGINE, with condensing work, in
excellent condition, with TWO BOILERS. The whole of the plant on the mine,
which would enable any new company to resume working. The pitwork in three
shafts, capstan, wire ropes, &c., &c.

iates, capsian, wire ropes, &c., &c. To view the same apply to Capt. Wm. Clemence, Llanarmon, near Mold. For price, &c., to H. Waddington, 78, Old Broad-street, London.

FOR SALE, a 14-horse power PORTABLE STEAM ENGINE, with link motion reversing gear, also gear to wind and pump.

A 25-horse power PORTABLE.

A 18-horse power VERTICAL STEAM ENGINE, and a 9% in. cylinder VER TICAL ENGINE, and combined winding drum.

A 6-fc. PAN MORTAR MILL, VERTICAL ENGINE, and BOILER.

Apply to-BARROWS AND STEWART, ENGINEERS, BANBURY.

THE LAST CHANCE SILVER MINING COMPANY OF UTAH (LIMITED).

(LIMITED).

SUBSCRIPTIONS are INVITED for THREE HUNDRED DEBENTURES at £10 each, balance of 1000 Debentures of £10 each, bearing interest at the rate of 15 per cent. per annum, and being a first charge on the mines and property of the company. Redeemable by half-yearly drawings within five years. The first drawing to take place October 23 next. £3 payable on application; £3 on allotment; and the remaining £4 three months after allotment. According to the latest reports there is now about £50,000 worth of one proved, the net profits on which will be far more than sufficient to cover the whole amount of the bonds, principal as well as interest, thus making them a perfectly secure investment.

Forms of Application, with the copies of the report on the mine, can be obtained at the offices of the company, 20, Great Winchester-street, London, E.C.

The LIST OF APPLICATIONS WILL CLOSE for LONDON on DEC. 1 next, and for the COUNTRY on DEC. 3 next.

By Order,

J. BUTLER WILLISON, Secretary.

M. ESSRS. HARLAND AND CO., STOCK AND SHARE DEALERS, 28, GREAT ST. HELEN'S, BISHOPSGATE STREET WITHIN, LONDON, E.C.

CAPTAIN ABSALOM FRANCIS, WINING ACENT, SUCCESS, AND SURVEYOR GOOGLEAN, ABERTSTWIPE.

Date. Mines. Nov. 29 - Tankerville Purchasers. Panther Lead Company. BLACK TIN. Date. Mines. Nov. 28-Wheal Coates Tons c. q. lb. Price per ton. Amount. Purchasers. ... 2 0 3 25 ... £41 5 0 ... — — Daubuz.

PERUVIAN TIN ORE SOLD IN LIVERPOOL. Furchasers.
Thos. Bolitho and Sons.
Thos. Bolitho and Sons.
Williams, Harvey, and Co.
ditto
ditto
Tregoning and Son.
ditto
ditto
Redruth Company.
Csienick Company. Price per ton. .. £31 2 6

COPPER ORES. and sold at the Royal Hotel, Truro, Nov. 22.

Mines.	Ton		F	rice		Mines.	Ton	B.	P	rice	
Devon Great	Consols112		£1	19	0	South Caradon			10	6	
ditto	87		1	2	6	ditto				13	(
ditto	78		4	13	6	ditto				3	1
	77		1	4	6	ditto	39		10	1	- (
	76		1	3	6	Marke Valley	91		3	3	1
	74		1	3	6	ditto	77	*****	5	9	1
	72		4	13	6	ditto	70		2	12	1
ditto	68		1	4	0	ditto	69		2	3	1
	67		3	18	6	ditto	48	*****	2	15	1
	61	******	1	5	6	ditto	34		3	6	1
	63		1	7	6	ditto	31		5	0	1
ditto	******* 50		4	12	0	Gunnislake (Clitters) 88		4	1	
			1	7	6	ditto	, 80	******	4	2	
ditto	43		1	6	6	ditto	78		4	2	1
ditto	5		16	15	6	ditto	76	******	4	3	
South Carad	on 94	******	2	10	6	Glasgow Caradon	69		3	4	1
	85		2	16	6	ditto	67		4		1
ditto	78		4	16	0	ditto	59		3	18	
ditto	70		5	5	6	Hingston Down	78		2	5	
ditto	74		4	12	6	ditto				5	
ditto	71		6	6	6	ditto	33		1	19	
ditto	64		3	3	6	Bedford United	90	******	3	0	
ditto	60		3	3	6	East Caradon	50		4	3	
ditto	59		- 5	4	6	Wheal Russell	36		2		
ditto	80		2	17	6	Botallack	35		6	3	
ditto	53		10	5	6						

d	South Caradon	940		4946	10	0	Bedford United	90	272 5	0
200	Marke Valley	420		1438	0	6	East Caradon	50	205 0	
d	Gunnislake (Clit.)	322		1323	17	0	Wheal Russell	36	79 4	ä
	Glasgow Caradon.	195	*****	735	10	0	Wheal Russell Botallack	35	216 17	9
18	Average standard			£ 87	14	0	Average produce	£3 13		
n.	Onantity of ore		o par		91	240	Quantity of fine cor	mer 236 to	ms 8 cwts	٠

Amount of money £11,821 18 6

			Terror and Assessment	-					
COMPANIES	BY	WHOM	THE	ORES	WERI	E PUI	RCHAS	ED.	
Names.					Tons.		Am		
Vivian and Sons					8745	É	€3922	16	
Grenfell and Bor	80				371 9	6			
Nevill, Druce, ar	nd Co				5891	6			
Williams, Foster	r. and	1 Co			993	******	3562	16	
Mason and Elki	ngtor	1			153		370	8	
Charles J. Lamb	ert .			*********	2585	£	. 813	6	
							£11,821	10	-
Total		********			. 3240	*****	E11,531	10	

NO SALE on Thursday last, November 29.
Copper ores for sale at Tabb's Hotel, Redruth, on Thursday next—Mines parcols.—West Tolgus 369—Mellanear 326—West Seton 302—South Crofty 14 East Pool 32—Wheal Basset 57—Carn Brea 52—New Cook's Kitchen 50—Basset 41—Tywarshaile 40—South Condurrow 35—Penstruthal 34—North T kerby 35—West Poldice 20—Wheal Agar 9—South Tolcarne ?—Rule's Predpit 2.—Total, 1455 tons.

NOTIC MA named Act CANDIDA

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THE addit and Professing, Plotting will also equivalenging The best in the profession of the best in t N.B.-Th

EMI 34, PALM MINING I Reports and CHEMICA Oyes, &c., n

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PUBLIC NDERTAL INTERALS NSPECTION Private In For terms HYD

Apply

TWENT SA moderate ENGIN ription, J. H TOLDE

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MESSRS.

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R. W MAN CLENCE AN MATHEM Marription, o

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R.

COAL MINES REGULATION ACT, 1872.

EXAMINATION FOR MANAGERS' CERTIFICATES OF COMPETENCY. DISTRICT UNDER THE CHARGE OF THOS. E. WALES, Esq., H.M. INSPECTOR OF MINES.

OTICE IS HEREBY GIVEN, that an EXAMINATION for MANAGERS' CENTIFICATES OF COMPETENCY, under the above-named Act, will be HELD on the 8th, 9th, and 10th days of January, 1878, and CANDIDATES INTENDING TO PRESENT THEMSELVES at such Examination must, on or before the 31st day of December next, notify such intention to the Secretary of the Board of the above-mentioned District, from whom all information as to particulars can be obtained.

By order of the Board,
CHAS. HY. JAMES, Secretary,
S, Courtland-terrace, Merthyr Tydfil.
y,B,—Persons who do not reside within the District are equally eligible for examination with those who do.

BURBANK STREET,

WEST HARTLEPOOL.

VACANCIES FOR THREE PUPILS AFTER CHRISTMAS.

THE INSTRUCTION given in the above Establishment (in addition to the usual Branches of Education for Mercantile, Commercial, and Professional Life) embraces the Studies of Practical Land Surveying, Leveling, Platting, Planning, Enbarging and Reducing Plans by the Pentagraph, and will also equip young gentlemen intending to become Architects, Mining and field Engineers, Land Agents, Land Surveyors, &c.

The best instruction will also be given in Latin and the Foreign Languages, the Pinnforte. Organ, &c.

N.B.—The Education given on all subjects will be thorough, and such as to expect the confidence and merit the esteem of Parents and Guardians committing their Sans to the care of the Principal.

Terms on application to the Principal, Burbank College, West Hartlepool.

EMMENS AND CO. (LIMITED), MINING ENGINEERS AND MANUFACTURING CHEMISTS.

PALMERSTON BUILDINGS, BISHOPSGATE STREET, LONDON, E.C. MATING DEPARTMENT.—The Management of Mines undertaken, and Technical Epports and Surveys made.
CHEMICAL DEPARTMENT.—Ores, Minerals, Acids, Salts, Arsenie, Pigments, pys, &c., manufactured and dealt in.

WM. W. KENRICK AND CO. CONTRACTORS.

ROCK BLASTING, SHAFT SINKING, TUNNELLING, MINING, &c.,
WITH DRILLING MACHINERY, HIGH-EXPLOSIVES, AND
ELECTRICITY.—A SPECIALITY.
WORK SOLICITED AT HOME AND ABROAD.

(LONDON OFFICE),
8, VICTORIA CHAMBERS, WESTMINSTER.

Mr. E. JACKSON,

Associate of the Royal School of Mines,

ANALYST AND ASSAYER.

Assays or Complete Analyses made of Copper, Silver, Lead, Zine, Tin, and

ASSAYING TAUGHT. 106, QUEEN VICTORIA STREET, LONDON, E.O.

W. F. LOWE, F.C.S., Associate of the Royal School of Mines,

ASSAYER AND ANALYTICAL CHEMIST

ASSAYS AND ANALYSES MADE OF ORES, FIRE-CLAYS, LIMESTONES, &c.

ADDRESS, - ASSAY OFFICE, CHESTER.

Mr. J. H. COLLINS, F.G.S.,
PUBLIC ANALYST for the County of Cornwall and Borough of Pensance,
PUBLIC ANALYST for the County of Cornwall and Borough of Pensance,
PUBLIC ANALYSTS of all articles of FOOD, DRINK, DRUGS,
MINERALS, MANURES, SOLIS, or COMMERCIAL PRODUCTS. Also the
PSPECTION of MINERAL PROPERTIES.
Private Instruction given in Practical Chemistry, Mineralogy, or Geology.
For terms, apply by letter, 57, Lemon-street. Truro.

HYDRAULIC PUMPING ENGINES, TWO, 50 M.P. ENGINES ON SALE-a Bargain.

Apply,-SUN FOUNDRY, LEEDS.

TWENTY-FIVE HP. PORTABLE ENGINE, almost new, FOR SALE OR HIRE, or on hire with option of purchase, on moderate terms.

ENGINES, BOILERS, AND COLLIERY PLANT, of every description, new and econdhand, always in stock. J. H. REDDEL AND CO., ENGINEERS, GLASGOW.

OLDENHILL COBALT, NICKEL, COLOUR, BORAX, AND CHEMICAL WORKS,
NEAR STOKE-UPON-TRENT, STAFFORDSHIRE
JOHN HENSHALL WILLIAMSON, MANUFACTURER AND REFINER.
Purchaser of Borate of Lime and Tincal.

VICKEL AND COBALT REFINING, AND GERMAN SILVER
WORKS, 16, OOZELL STREET NORTH, BIRMINGHAM.
STEPHEN BARKER begs to inform the Trade that he has the following arti
sistor sale:— REFINED METALLIC NICKEL.
REFINED METALLIC NICKEL.
OXIDE OF COBALT.
GERMAN SILVER-IN INGOTS, SHEET, WIRE, &c.
NICKEL AND COBALT ORES PURCHASED.

BOHEMIAN TIN MINING COMPANY

(LIMITED).

(LIMITED).

Capital £20,000, in 2000 Shares of £10 each,

Of which 800 are taken by the vendor, and 600 subscribed privately,
leaving only 600 to be offered for subscription.

Deposit on application, £1 per share; payment on allotment,
£4 per share, and £2 10s. in two months.

The remaining £2 10s. will not, it is believed, be required
to be paid up.

TRUSTEES.

Lieutenant-Colonel OMMANNEY, J.P.

F. A. PHILBRICK, Esq., Q.C.

DANNERS. CO. 43 Charing Gross, S.W.

MESSRS. COCKS, BIDDULPH, AND CO., 43, Charing Cross, S.W.

The company is formed for purchasing and working a valuable Tin Mining erty in Bohemia.

suine was most favourably reported on some years since by the late EVAN UNS, E-q., F.G.S., and Capt. JOSIAH THOMAS, of the Dolcoath Mine, and as if ya sin July last by C.pt. J. MAYNARD, of the East Pool Mine, who found tracedinarily rich for tin of most remarkable purity. According to his optime working even for the first year will produce to the shareholders profits it 100 per cent.

two per cent.

Firms on which the purchase has been made are highly advantageous, as an two thirds of the purchase money is dependent on the success of the

g.
pectuses, containing full particulars, with a copy of Capt. MAYNARD's
and Form of Application for Shares, may be obtained by applying, peror by letter, to the Secretary, at the offices of the company—

26, CANADA BUILDINGS, KING STREET, WESTMINSTER.

THE SHARE LIST CLOSES ON THE 15TH OF DECEMBER.

R. W. F. STANLEY, MATHEMATICAL INSTRUMENT
MANUFACTURER TO H.M 'S GOVERNMENT, COUNCIL OF INDIA
TENCE AND ART DEPARTMENT, ADMIRALTY, &c.
MATHEMATICAL, DRAWING, and SURVEYING INSTRUMENTS of every
scription, of the highest quality and finish, at the most moderate prices.

ADDRESS-GREAT TURNSTILE, HOLBORN, LONDON, W.C.

M R J S. M E R R AND AWALYTICAL CHEMIST,

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACTS, 1862 and 1867, and of the CHARLOTTE UNITED MINES (LIMITED).—By an Order, made by His Honor the Vice Warden of the Stannaries in the said Matter, dated this day, on the Petition of John Reynolds, Philip Tonkin, James Williams, Joseph Carveth, James Tookin, and Janies Tregellas, all of the parish of St. Agnes, within the said Stannaries, working miners (working as John Reynolds and pare), and of Francis Mitchell, of the same parish, mine engine driver, claiming to be creditors of the said company, IT WAS ORDERED that the said Charlotte United Mines (Limited) should be WOUND-UP by this Court, under the provisions of the Companies Act, 1862.

HODGE, HOCKIN, AND MARRACK, Trupo

HODGE, HOCKIN, AND MARRACK, Truro (Solicitors for the said Petitioners). Dated Truro, November 23rd, 1877.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

N the MATTER of the COMPANIES ACTS, 1862 and 1867, and of the CHARLOTTE UNITED MINES (LIMITED).—The Vice-Warden has, by an Order made in the above Matter, bearing date this day, APPOINTED JOHN HENRY HAMLEY, of Truro, within the said Stannaries, an Officer of the said Court, to be absolutely the OFFICTAL LIQUIDATOR of the ABOVE NAMED COMPANY.

Dated Registrar's Office, Truro, Nov. 23, 1877.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACTS, 1862 and 1867, and of the CHARLOTTE UNITED MINES (LIMITED).— Notice is hereby given, that ALL CREDITORS OF THE ABOVE-NAMED COMPANY are required, on or before the 8th day of December next, to SEN D IN THEIR NAMES AND ADDRESSES, and the AMOUNTS and PARTICULARS of their SEVERAL CLAIMS, to John HERRY HAMLEY, the Official Liquiditor of the said company, at the Stannaries Court Office, in Truro, within the said Stannaries.

FREDERICK MARSHALL, Registrar, Dated Registrar's Office, Truro, Nov. 23, 1877.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

In the MATTER of the COMPANIES ACTS, 1862 and 1867, and st the EAST ROCKS HEMATITE IRON ORE COMPANY (LIMITED).

—By an OFler, made by His Honor the Vice-Warden of the Stannaries, in the said Matter, dated this day, on the petition of William Arundel Oatey and John Martyn, carrying on business at Wadebridge, within the said Stannaries, as General Merchants, under the style of "Oatey and Martyn," c'aiming to be creditors of the said company, IT WAS ORDERED that the said EAST HOCKS HEMATITE IRON ORE COMPANY (LIMITED) should be WOUND-UP by the Court under the provisions of the Companies Act, 1862.

HODGE, HOCKIN, AND MARRACK, Truro.

(Solicitors for the said Petitioners.)

Dated Truro, November 24th, 1877.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACTS, 1862 and 1867, and of the EAST ROCKS HEMATITE IRON ORE COMPANY (LIMITED).—
The Vice-Warden has, by an Order made in the above Matter, bearing date this day, appointed JOHN HENRY HAMLEY, of Truro, within the said Stannaries, an Officer of the said Court, to be absolutely the OFFICIAL LIQUIDATOR of the above mamed company.

FREDERICK MARSHALL, Registrar.

Dated Registrar's Office, Truro, this 24th day of November, 1877.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACTS, 1862 and 1867, and of the EAST ROCKS HEMATITE IRON ORE COMPANY (LIMITED).—
Notice is hereby given, that ALL CREDITORS of the above-named company are required, on or before the 8th day of December next, to SEND IN their NAMES and ADDRESSES, and the AMOUNTS and PARTICULARS of their several CLAIMS, to JOHN HENNY HAMLEY, the Official Liquidator of the said company, at the Stannaries Court Office, in Truro, within the said Stannaries.

PREDERICK MARSHALL, Registrar.

Dated Registrar's Office, Truro, this 24th day of November, 1877.

RE THOMAS STOKOE, DECASED.

RE THOMAS STOKOE, DECASED.

SALE OF ONE THOUSAND EIGHT HUNDRED AND FIFTY SHARES IN THE LONDON AND SOUTH WALES COAL COMPANY (LIMITED).

MR. SIMEON JOEL is instructed by the Executors TO SELL, BY AUCTION, at his Sale Rooms, Pilgrim-street, Newcastle-upon-Type, on Wednesday, the 5th of December, 1877, at Twelve c'eleck at noon. prompt, ALL THOSE ONE THOUSAND EIGHT HUNDRED AND FIFTY £10 shares, Nos. 7851 to 8550 inclusive, and 31,901 to 32,750 inclusive, in the LONDON AND SOUTH WALES COAL COMPANY (LIMITED).

£9 12s. 6d. has been paid upon each of these shares.

The shares will be offered in lots of fifty and upwards, as may be determined at the time of sale.

For further particulars and conditions of sale, apply to Mr. John Fleming, Solicitor, Union Chambers, Grainger-street West; or the Auctioneer, 65 and 67, Pilgrim-street, Newcastle-on-Tyne.

HAZEL GROVE, CALCOT HALL, AND CAERHUN AMALGAMATED

HAZEL GROVE, CALCOT HALL, AND CAERHUN AMALGAMATED
LEAD MINES COMPANY (LIMITED).

THE LIQUIDATORS of this COMPANY are PREPARED to
RECEIVE TENDERS for the
LEASES, PLANT, AND MACHINERY

Of the above MINES, situate at HOLYWELL, FLINTSHIRE.
The properties may be viewed on application to the Rev. DAVID JONES, Brynford Rectory, Holywell, from whom also further information may be obtained; or from the Liquidators, 20, Colmore-row, Birmingham.
Tenders, addressed to the Liquidators as above, to be seen in before the 31st of December next.

Tor Self and Co., Liquidators,
20, Colmore-row, Birmingham, November 29, 1877.

A. C. COX.

SOUTH WALES.

THE NANT-Y-GLO COMPANY are desirous of LETTING the following VERY VALUABLE STEAM COAL COLLIERES:—

The GRIFFIN PIT, at which new winding machinery has lately been erected at a very large outlay. This pit is situated on the Monmouthshire Railway, and has every appliance for turning out 500 tons of coal per day.

Also, the HENWAIN PIT, capable of turning out from 300 to 400 tons a day. The above COLITERIES are now in ACTIVE OPERATION, and are working the ELLED BIG VEIN and THREE-QUARTER SEAMS of COAL.

The NANT Y-GLO COMPANY have VARIOUS OTHER COLLIERIES in OPERATION and TAGTS of UNWON MINERALS TO BE LET. Various sinkings around the property have proved the minerals.

They adjoin the property of the Ebbw Vale Steel, Iron, and Coal Company (Limited), Messrs. J. G. and W. Barnes, of Liverpool, the Blaenavon Iron and Steel Company (Limited), and the South Wales Colliery Company (Limited), and the South Wales Colliery Company (Limited), and the property of the Subw Ales Colliery Company (Limited), and the plant may be obtained either by purchase or on simple hire. For particulars, apply to WILLIAM ADAMS, of Cardiff, the Consulting Engineer of the Company, at the offices of the Nanty-Glo Company, 4. Norfolk-street, Manchester; and to Messrs. Colbonne and Ward, Solicitors, Newport, Mon.

TO BE LET, under the Ecclesiastical Commissioners, a LEAD MINE, with "strong lode" visible—"The best specimen in Somerset-shire: £300 to be paid down.
Address, "The Rector," Winford, Bristol.

SLATE QUARRY IN WALES, FOR SALE BY PRIVATE BARGAIN.

THE NORTHERN WELSH SLATE COMPANY'S QUARRY, "CHWAREL FAWR," situated near CARNARVON, in the centre of the BANGOR SLATE RANGE, at present in full operation, producing excellent SLATES, and comprising ONE HUNDRED AND TWENTY FOUR ACRES, leased from the Crown at a moderate royalty.

For particulars, apply to MOORE and BROWN, C.A., No. 166, St. Vincent-street, Glasgow.

VALUABLE MINING MACHINERY AND PLANT, at the PROVIDENCE MINES, Uny Lelant, Cornwall, FOR SALE, BY PRIVATE CONTRACT, in Lots, to suit the convenience of purchasers -viz.: -ONE 40 in. PUMPING ENGINE, 9 ft. stroke, with TWO 11 ton BOILERS

PRIVATE CUNTRACE, B. ONGINE, 9 ft. stroke, with 1 WO DOLLERS, ONE 40 in. PUMPING ENGINE, 9 ft. stroke, with TWO BOILERS, ONE 30 in. STAMPING ENGINE, 9 ft. and 8 ft. stroke, with TWO BOILERS, 19 tons, two fly wheels and wrought iron shafts, two stamps axies for 32 heads, with heads, lifters, &c.

ONE 23 in. WINDING ENGINE, double acting, 6 ft. stroke, with TWO ONE 23 in. WINDING ENGINE, and whim cage.

with heads, interes, as.

ONE 23 in. WINDING ENGINE, double acting, o it. server,

ONE 20 in. "MAN ENGINE," double acting, 6 ft. stroke, one fly wheel, two
wrought iron shafts, and ONE 8 ion BOILER and FITTINGS, balance bob, &c.

ONE heavy 10 feet diameter TOOTH WHEEL, with wrought-iron shaft, plum
mer blocks nud brasses.

ONE 8 in. HORIZONTAL ENGINE, 20 in. stroke.

BALANCE BOB at engine, with connecting rod, &c., complete.

Also all the extensive

PLANT, MATERIALS, GEAR, AND MACHINERY, Including PUMPS of various sizes.

Particulars in an inventory thereof, which may be seen on the mine.
For further information, and to view, apply to Captain Hollow, the Manager,
on the Mine; or to—
Dated 13th November, 1877.

MALLEABLE IRON CASTINGS,
Every Description.
W. B. MAPPLEBECK

BIRMINGHAM.

THE BIRMINGHAM WAGON COMPANY

THE BIRMINGHAM WAGON COMPANY

(LIMITED)

MANUFACTURE RAILWAY CARRIAGES and WAGONS of EVERY DE
BORIPPION, for HIRE and BALE, by immediate or deferred payments. They

have also wagons for hire capable of carrying 6, 8, and 10 tons, part of which

are constructed specially for shipping purposes. Wagons in working order main
tained by contract. MANUFACTURERS also of IRONWORK, WHEELS, and

AXLES. WAGON WORKS,—SMETHWIOK, BIRMINGHAM.

WINDING ENGINES, NEW PRINCIPLE, best and most compact in the market. Several pairs ready.

PORTABLE WINDING AND SINKING ENGINES, the cheapest and most convenient and durable.

STEAM CAPSTANS AND HAULING ENGINES. The greatest power in the space of any made.

HORIZONTAL, VERTICAL, AND PORTABLE ENGINES. First-class make and low price.

PUNCHING, SHEARING, DRILLING, AND OTHER MACHINES.

Many of the above secondhand, very cheap.

ALEXANDER SMITH, ENGINEER, THE MIDLAND MACHINERY STORES.—Offices: PRIOR STREET, DUDLEY.

TO COLLIERY AND MINE OWNERS, ENGINEERS, IRONFOUNDERS AND CONTRACTORS, &c.

JAMES AND KNOTT,

DARLINGTON,

DARLING TON,
Are now in a position to SUPPLY their "SPECIAL" LUBRICATING OIL,
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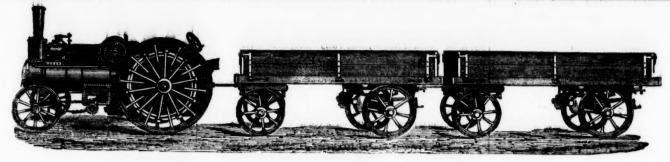
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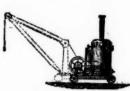
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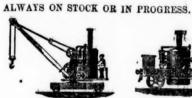
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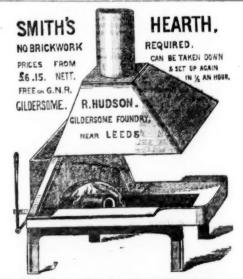
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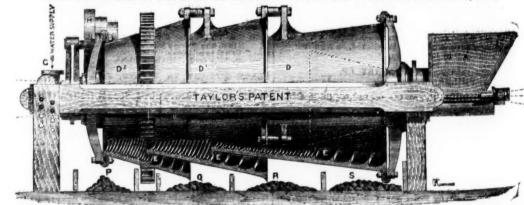
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Sees Imperial Brazilias Collieries, Brazil*
99000 I. I. L., g, s, California.
50000 Javail, g, Nicaragua 100 % % Fully pd. 200 % % Fully pd. 200 % % Fully pd. 200 % % Fully pd.
25000 Lamestoes, 1, z, Yisenya, Spain (22 shares)
75:000 Malabar, g, Colombia* 47146 lasued) 100 Mar. 1876 40:000 Malpaso, g, Colombia* (75:00 pref. shares, fully paid) 100 Mar. 1876 Fully pd.
12000 Menzanterg, c, Honnef, Germany
#8000 New Quebrada, c, Venezuela" 5 0 0 — Nov. 1876 20000 New Zealand Kapanga, g, Coromandale 5 0 0 2½ 2 2½ Fully pd
2000 New Zealand Kapanga, g. Coromande)* 5 0 0 1½ 1½ 1½ Pully pd. 5000 Oregon, g. Oregon, U.S. (preference shares) 5 0 0 1½ 1½ 1½ Pully pd.
50000 Panuleillo, c, Chili** (20000 de) entures
50000 Avail, g, Nicaragua 2 0 0
\$5000 Rice, g, Colombia* (40000 issued) 1 0 0 % % Pully pd. 2.1e1,000 Rice Tinto, c, Hueiva, Spain 1 0 0 % % Pully pd. 00000 Roces Grande, g, Brazil* (24 tokres) 8tock (6 5) 55 Fully pd.
00000 Rossa Grande, g. Brazil*1 (£1 shares) Stock (6 & 50 55 Fully pd. 30000 Rossia Copper, Grenourg and Crast 2 18 0 4 4 4 July 1800
30000 Russia Copper, Granourg and Cfart 018 0 % 16 0 18 2
19090 Silver Flume, s, Colorado* 2 0 0 1 1 1 1 2 1 2 1 2 2 2 2 2 2 2 2 2
Zuralini Amer, y, Australia
1000 Yorke Penjapula, s, South Australia Preference 1 00 % % % % Fully pd.
Mave made calls since last dividend was paid.

\$ Have	made	calls	since	Last	divide	ud	WEE	paid	

FOREIGN AND	MISCELLANEOUS STOCKS	

FOREIGN AND MISCELLANEOUS ST	OCKS, BONDS, LOANS, AND T	RUS	37%
Argenetics, 1806, 6 per cent. 72 14 Boulvis, C per cent. 21 23 Boulvis, C per cent. 22 23 Boulvis, C per cent. 22 23 Boulvis, 1806, 1 per cent. 22 24 Colline, 1806, 1 per cent. 22 24 Colline, 1806, 1 per cent. 22 25 Bouy of Frontideston, 6 per cent. 22 25 Bouy, 1 per cent. 22 25 Bouy, 1 per cent. 23 25 Bouy, 1 per cent. 23 25 Bouy, 1 per cent. 23 25 Bouy, 1 per cent. 24 25 Bouy, 1 per cent. 25 25 Bouy, 1 per ce	Foreign and Col. Gov. Trust, 6 p. ct. Do., 5 per cent., 2d insue Do., 6 per cent., 3d insue Do., 1872, 4th insue Do., 1875, 6th insue Fernatus, 1870, 6 per cent. Do., 1872, 5 per cent. Numerica, 4% per cent.	65 02 60 60 60 46 12	65 57 56 50 50
200 1 per ecot., E & L	Calted Status Mort, 6 p. et	96	97

	NON-DIVIDEND				304
Star 10000	Aberdannant, f. Llanidloes*		1 0 0	ast wk. Cles. pr	#10
81	Abion, t, Cornwall Alvig. & Burng., *t, St. Aust. Ambrose Lake, t, c, Liskeard	.10	8 0 0 0 0 0 3 0 0	100 100	10
				1 % 1	
12000 12000	Bedford Unit., c, Tavist. (11. liab.) Belstone. c, Pevon (27,000 fy. pd.))	0 0	% % %	10
\$937 \$0000	Blaen United, * s-l, Cardigan Blue Hills, t, c, St. Agnes Bodidris, * l, bl. Denbighshire		10 0	 1% 1 1%	
200	Assilveon,, Carnarvonite Ballycummiak, *c, Schull Bedford Unit., *c, Tavist. (1l. liab. Belstone. *c, Peron (21,000 fy. pd.) Blaen United, *s-l, Cardigan Bine Hills, *t.c., St. Agnes Boddgris, *l. bl. Denbighshire Bollihore Vale, *s-l, Durham Botallack, *t.c., St. Just[121	5 0 5 0	= :::	10
6000	Bradwell Moss Bake	1	2 0 0	1 % 1	1
\$848 0000	Cambrian. * s-l, c, Cardiganshire Cargoll, s-l, Newlyn?		14 0	24 24 24 3 24 3 24 24 3	i
20000	Central Foxdale, I, I of Man*(2l, sh. Central Van, 1, bl. Llanidless) 1	5 0 0		
75.00 6000	Combellack,* t, Wendron	2	7 0	- W W W	1
84 - 0 80000 65	Caidbock Fells, i, Cumberland* Cambrian, *s.l, c, Cardiganshire Cargoll, s.l, Newlyn; Caron, i, Cardiganshire Caron, i, Cardigan* Central Foxiale; i, 1, of Man*(2l. sh. Central Van. *l, bl. Llanidloss Clementina, i, Llanrwst Combellack, *t, Wendron Combmartin, s.l, North Devon Court Grange, s.l. (8000 sh. 10s. pd.). Cwm Dwyder, *c, s.l. (2nrarvond.). Cwm Dwyder, *c, s.l. (2nrarvond.). Cwm Dwyder, *s.l. (2nrarvond.). Cwm Swyder, *s.l. (2nrarvond.). Cwm Swyder, *s.l. (2nrarvond.). Cwm Swyder, *s.l. (2nrarvond.). Cwn Dwyder, *s.l. (2nrarvond.). Cwn D		18 9	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2
512	Cwaystwith (New) [5l. shares] D'Eresby Mountain, l, bl, Llanrwst. Denbigashire Consolidated, l*	. 20	0 0 0	20 15 20	
2000	Dubby Syke, J. Durham	0	12 6	20 15 20 114 1 2 214 134 2 34 14	1
6144	East Caradon, c, St. Cleer, East Chiverton, c Perranzabuloe. East Craven Moor*, l, Pateley Bidge East Goginan, d, Cardigan East Van., Llandless East Wh. Lovell, f, Helston Elgar, * s-l, Cardigaushire	26	16 6	11/4 11/4 11/4 3 21/4 3 10/410 10/4	1 8
8000	East Goginan, I, Cardigan East Van. I, Llanidlees	2	0 0	44 31/4	1
1722	East Wh. Lovell, f, Helston	8	0 0	4¼ 8¼ 4 1¼ . 1 1¼ 1½ 1 1¾	1
\$950 2000	Fronvellan, I, Mont. * [4000sh.fy.pd. Gawton, c, Tavistock Glan Clwyd. * I. Gwyddelwern	4	5 6	36 36 36	3
4000	Gawton, c, Tavistock Glan Clwyd,* l. Gwyddelwern Glenroy,* s-l, Isle of Man Glyn,* l. Llanidloes	2	9 O.z.	1 3/ 1 5/4 - 3/4 5/6	10
00000	orginan, & Level Newydd, Card., 0 Gold, c, Merionethshire. Goreu, *s. Carmarthen Gt. E. Foxdale, i, I. of Man (II. sh Great Holway, *i. Flintshire. Great Party - Pydew, i. Holywell. Gt. Wheal Eleanor, f, North Borey, Grosyenor, J. Holywell, (f. sh.)	1	0 0	1% . 1% 1%	2
2000 9500	Great Holway, * 1. Flintshire	8 2	0 0	514 5 6	1
	mineral of men's ment (me amil)		15 0		3
64 m 5000	Harehope Gill, * 1, Durham (£1 sh.) Harwood, * 1, Durham Hush Eisteddfod Minera, * 1	0 2	0 0	1 1	3 8 8
2500	Islay,* l, Scotland Killaloe, sl, Tipperary! Killifreth, l, Chaoewater Kingston Con., s-l, Stoke Climsland. Ditto, preference	28	. 0		5
5000	Kingston Con., s., Stoke Climsland. Ditto, preference	1	0 0	- 14 · 14 · 14	10
2000	Ditto, 10 per ceut. pref., 1/l. each	300	10 0	154 74 114 96 36 96	10
\$000 \$000	Ditto, 10 per cent. pref., 11. each Levant, c, r, St. Just Levant, c, r, St. Just Lianthaidri J. Montgomery* Livingstone Consols, r, St. Agnes Lanewst, J. Carnarvon Llwyn Teify, st., Cardigan	0	0 0	- % · · · · · · · · · · ·	8 2
5000 6000	Liwyn Teify, * s.l, Cardigan	1	0 0	= :::	10
2530 6100	Medlyn Moor, f, Wendron Mellanear Copper, Hayle* Ditto	1	0 0	2½ 2½ 2½ 2 1½ 2 ½ ½ %	50
1000	Ditto Meyn'w l. Cardigan* Monydd Gorddu, l, Cardigan* (Red. Nant-y-Ronen, s.l. Cardigan*) 5	0 0		10
4525 10000	Nant-y-Rones, s-i, Cardigan Mascent Copper Mascent Copper Mascent Copper Mascent Copper Mascent Copper Mascent Copper Mascent Cardigan (Sl. sh.) New Consols, s,a (in liquidation) Mew Dolcoath, t, c, Camborne Mascent Foxdale, s-i, Isle of Man. New Foxey Consols, t, St. Blazey New Hendra, t, Breage	3	0 0	= :::	8
8000 0000 4000	New Dolcoath, t, c, Camborne New East Foxdale, s-l, Isle of Man.	3 0	18 0	1%1% 1%	1
1492	New Hendra, t. Breage	3	9 0	1 1/4 1	10
5010 4 00	New Wheal Emma, c. Buckfastleigh North Cornwall, 2, Cornwall	3	0 0	514 514 514	
2000 2000	North Levant, t, c, St. Just] North Prince Patrick, t, Holywell.	12	20	- 34 34 34 34 34 34 34 34 34 34 34 34 34	10
5936 2000	New Howey Consols, t, St. Blazey*. New Henira, t, Breage. New South Meriton, t, Flint* New Tincroft, t, Lelant. New Wheal Emma, t, Buckfastleigh North Leven, t, Le of Man. North Leven, t, t, St. Just; North Levent, t, c, St. Just; North Prince Patrick, t, Holywell. North Treskerby, c, St. Agues. North Wheal Towan, t, c, Illogan.	1	7 10.	= ::.	2
5400	Oola Hills, s.l. Limerick	- 3	0 0	1 1/4 1	1
6923 4000	Pandora * I. Carnervon Panty Mwyn * I. Mold (5794 iss.) Parys Mountain, * c. Angieses Pata ev Bridge, I. Yorkshire Plynlimmon, I. Llanidloss* Polrose, I. Breage Port Nigel, * s.I. Carnervonshire Prideaux Wood, I. Llanivery. Prince of Wales, c, Calatock	8 5	00	54 - 14 54 4 - 314 4	2
2000 648 0000	Plynlimmon, i, Llanidless* Poirose, t, Breage Port Nigel, s.l. Carnaryonshire	21 2	0 0	* X %	2
2000 5182	Prince of Wales, c, Calstock	8	0 0		
5000	Rookhope, I, Durham*	1	10 0	1% 1% 1%	"BL
5000 4200	Silvercross, c, t, Marazion	5	0 0	= :::	3
5000 512	South Darren, I, Cardigan*	1 12	10 0	1% . 1% 1%	1
\$000 8000 6000	So. Molton Cons., s-l, No. Devon South Roman Gravels, i* South Roskers, t, c, Camborne	0	2 0 10 0 10 0	% - % %	Sth
937 4500	South Tolcarne, t, c, Camborne South Wheal Crofty, c, Illogan South Wh. Frances, c, Illogant	29	10 10 . 10 10 .	% % % % % % % % % % % % % % % % % % %	1100
8000 0000 4000	Snowbrook, s.t., Montgomery So. Cwmystwith, t., Cardigansiire. South Darren, I., Cardigans South Dolcouth, e.t., Redruth So. Moiton Con., s.t., No. Devon South Komin Gravite, it South Tolcame, t. e., Camborne South Tolcame, t. e., Camborne South Whall Crofty, e., Illogan South Wh. Frances, e., Illogant. St. Lawrence, Amal., Flintshire* St. Patricki, Halkin, Holywell* Success, &c., i, Derb., Il2,000t. called. Bunnyside, t. Durham	1	0 0	1% 1 1%	••••
6000	Sunnyaide, * i, Durham	2	0 0	3% . 2 3%	Stk.
6400 4000	Talybont, s.l., Cardiganshire	1	0 0	74 % 76	21
0000 2000	Temple, t, Cardigan Tolgus Consols, c, Hedruth Trebeigh Consols, s-t, St. Ive	5 0	00	214 214 214 2 4 214 2 4	5th
2000 2000 540	Treteligh Wood, f, Hedruth	10	0 0		Stie Stie
0000	Van Consols, i. Cardigan Van Consols, i. Lianidio	1	10 0	1%1% 1%	21
2000	West Assiston, I, Carnarion	10	0 0	***	1
55(6) 7(90)	West Assiston, J. Carnarion West Basset, c. Hiogant; West Combinartia, c. J. North Devon Ditto	1 0	0 0	1 ½ 1 2½ 2 2½ ½ ½ ½ ½ ½ ½	1
21190 21190 21190	W Craven Moor, , Pateley Bridge*. Wort Godolphin, ', c, Brenge West Goginan, Cardiganshire	10 2 2	10 0	10½ . 10 10¼ 2½ 2 2½ % ½ ¾	Htk.
0000 0000	Ditto W Craven Moor, Pateley Bridge* Wost Godolphin, , e, Bræge West Goginsn, Cardigansnire West Liangynog, e, i Montpomery. West Mary Ann, i Menhenist West More and Company. West Misser Single, i, Yorkshire West Hoseken I e, b, c, Cambone, West Hoseken I e, b, c, Cambone, Ditto, 15 per cent pref.	90	0 0 8 6	1 % 1	Htk. Htk.
6(6)6) (5/6)1 1(7/6)	West of England Granite Company. West Pate by Bridge, I, Yorkshire. West Rossear ! #	3 1 2	0 0	3 2 2% 3 2% 17% 15 17%	7 %
2000 2000 5000	West Tanzer-lile, 1, Salop Ditto, 15 per cent pref.	8 27	0 0	% % % 2 1% 2 1% 1% 1%	Stk.
8(A)) 6(A)	West Tanker life. 1, Salop Jitto, 15 per oeat pref. West Treavean. 2, f. Gwennap. West Wissal Forevor, f. Redrutti Wissal Agen, c. Hlogan. Wissal Agen, c. Hlogan. Wissal Agen, c. Hlogan. Wissal Contes, f. St. Agnes.	47	0 0	18 14 16	Melin 10 60
612	Wheel Couter, t, St. Agnes	22	0 0 2 6	18 14 16 4½ 4 4½ 16 14 16	Htk. Htk.
0000 5179	Wheel Confort, c, Gwennap Wheel Cresor, c, Tavianca Whoal Grenville, c, Camporne	4 2	10	14 - 4 14 84 - 8 84	Btk 1
200	Wo Mary Butchings, " , Plympton	1	1 6	6% 6% 6%	1
680	Wheel Russell, c, Tavistoir - wel Cay, t, c Resirate White Cliff, * (, Liaerwet	12	16 6	1% 1% 1%	HIL
o, ble	ade; d, coal; c, copper; g, gold; l, el, silver lead; l, Ua;	len e, z	A; a, ail	ver; sl, slate;	L
	STAGE TO STATE OF THE STATE OF				

IRON AND COAL COM	PANIES.
	Paid.
	75 0 0 9 Price.
Alltami Colliery Co. [L.]	5 00
10 0	00 00 Kg dis.
	10 0 0 7
10 Bilson & Crump Meadow Coll Co. (L.)	50 0 0 19 1
Blace Cwmbach Coal Co. [L.]	10 0 0 10 31
50 Biaenavon Iron and Steel Co. [L.]	6 0 0
Bolckow, Vaughan, and Co. [L.]A	50 0 0 316 Tu
50 Britannia Ironworks [L.]	50 0 0 ** 4%
50 Brown, Bailey, and Dixon [L.]	28 0 0 10 0 0 18 17
S Cakemore Colliery Co. [L.]	0 0 0 11 17%
Cakemore Colliery Co. [L.]	
100 Cammell and Co. [L.]. 20 Cammell and Co. [L.]. 20 Cannock and Huntington Coal [L.]. 10 Cardigan Steel and Wire Co. [L.]. 10 Cardigan Steel and Wire Co. [L.]. 10 Cardigan Steel and Wire Co. [L.].	6 0 0 3
10 Cardigan Steel and Wire Co. [L.].	W 0 0 1 ***
	10 00
	5 00 00 3
80 0	00 0 0 10
10 Chillington Iron Co. [L.]	10 0 0 25
1 Clee Hill Colliery Co. [L.]	
1 Consett Spanish Ore (L.)	7 10 0 10 16 10 10 10 10 10 10 10 10 10 10 10 10 10
60 Cooke, William, and Co. [L.]	10 0 0 20
20 Darlington Iron Co. [L.]	12 10 0 13 30
5 Diamond Fuel Co [L.]	5 0 0 5
32 Ebbw Vale Co. [L.]	9 0 0 20 19
10 Fox, Samuel, and Co. [L.]	90 0 0 28 19
20 Great Western Coai Co. [L.]	9 0 0 2 3
Gwyngwillim Colliery Co. [L.]	2 0 0
NO Vacantas Andrews and Company	734 74
10 Llay Hall Coal, Iron, & Firebrick [L.]	0 00 18 2
Littledean Woodside Coll. Co. [L.]	0 0 0
10 Liyavi, Ogmore, & Tondu Co. [L.] 1	0 0 0 7
10 Marbella Iron Ore Co. [L.]	10 00 0 0
6 Mersey Steel and Iron Co. (L.)	0 0 0
Midland Iron Co. [L.]	0 0 0 W dla
Midland Iron Co. [L.] Mold Argoed Colliery Co. [L.] Monkland Iron and Coal Co. [L.]	
4 Mwyndy Iron Ore [L.]	8 10 0
awynny fron Ore L. (2008) awynny fron Ore L. (2008) Nerbudda Coal and Irou [L. & Red.] New Sharlston Collieries [L.] Pref Newport Aberearn Coal Co. [L.] Northmpta. Coal, Iron & Wagon [L.] Northrield Iron Co. [L.] Norton Green Coal Co. [L.] Shelwing Shiphylides and Iron [L.]	9 0 0 19 21
20 New Sharlston Collieries [L.] Pref	90 0 0 171/
10 Newport Abercarn Coal Co. [L.] 1	0 0 0 4
10 Northmeta. Coal, Iron & Wagon [L.] 10 Northfield Iron Co. [L.]	8 0 0
1 Norton Green Coal Co. [L.]	1 0 0
35 Palmer's Shipbuilding and Iron [L.]	35 0 0 18 vest
20 Patent Nut and Bolt Co. [L.]	4 0 0 10 8
20 Patent Shaft and Axletree [L.]	0 0 0 12 Ala
	0 0 0 121/ 111/
50 Rhymney Iron Co. [L.]	0 0 0 -
	0 0 0 22 24
	0 0 0
	0 00 1816 194
100 Sheepbridge Iron and Coal [L.] !	8 0 0 10
50 Silkstone & Dodworth Cl. & Iron[L.]	7 0 0
30 Skerne Ironworks [L.]	0 0 0 14% 14
26 South Wales Coal Co. [L.] 2	1 00 614 715
100 Staveley Iron and Coal Co. [L.] 6	
100 Ditto ditto New 10	6 0 0 4 4%
100 Thames Iron Company 10	0 0 0
50 Tredegar Iron and Coal Co. [L.] 2 25 Ditto B. shares	0 0 0 11 9
20 Ulverston Mining Co. [L.]	5 0 0 21 21
10 Vancouver Coal [L.]	6 0 0 114 114
100 Vickers, Sons, & Co. [L.] 10	0 0 0 24 26
50 Welsh Ironworks Co. [L.]	0 0 0 1214 114
10 West Mostyn Coal [L.] (12 p.c.pref.)	8 0 0
5 West Swansea Colliery Co. [L.]	5 0 0
Weish fromworks Co. Lt.]. West Mostyn Coal [L.] (12 p.e.pref.) West Mostyn Coal [L.] (12 p.e.pref.) West Swansea Colliery Co. [L.]. Whitehaven Iron Co. [L.]. Wigan and Whiston Coal Co. [L.].	0 0 0
100 Wigan Coal and Iron Co. [L.]	5 0 0
WAGON COMPAN	
10 Birmingham Wagon Co. [L.] 1	0 0 0 1814 1814
10 Ditto, 2nd issue	4 0 0 356 35

	WAGON COMPAN	ME	S.	
10	Birmingham Wagon Co. [L.]	10	0 0 1814	1970
10	Ditto, 2nd issue	4	0 0 356	316
10	Ditto, pref., 6 per cent	10	0 0 12	1217
	British Wagon Co. [L.]	10	0 0 par	14
	Gloucester [L.]	10	0 0 par	
	Ditto, 5th issue		0 0 1%	
10	Met. Rail. Car. and Wagon Co. [L.]	5	0 0 314	
5	Ditto, pref., 6 per cent	5	0 0 6	616
	Midland		0 0 7	736
20	North Central Wagon Co		0 0 2714	2716
5	Rail. Car. [L.] (Oldbury)	5	00. 6%	7
5	Ditto, pref., 6 per cent	5	00. 5%	514
20	Sheffield Wagon Co. [L.]		0 0 314	356
	Yorkshire Wagon Co. [L.]	10	0 0 434	8

TELECHARIL COMPANIES

	TELEGRAPH COMP	AN	11	3.		
" Bt."	Anglo-American	100	0	0	57	57%
10	Brazilian Submarine	10		0		616
20	Direct United States Cab's	20	0	0	1236	12%
10	Eastern	10	0	0	736	736
10	East. Exten., Australia and China	10	0	0	7 54	7%
10	Great Northern				71/4	716
	Indo-European			0		20
	Mediterranean Extension				21/2	3
	Reuters			0		10
	Submarine			0		237
10	West India and Panama	10	0	0	21/4	3
	Western and Brazilian					516
1 1000	Western Union, 7 per cent. Mort. Bon	da \$1	00	0	109	111

MISCELLANEO	US.					В
Stk. Atlantic and Great Western Leased						В
Lines, Rental Trust	100	0	0	38	40	в
28 Australian Agricultural	21	10	0	93	25	в
28 Austral. Mort. Land and Finance [L.]	- 8			41/4	1%	
10 Avonside Engine [L.]	7		0		3	в
Stk. Baltimore and Ohio, a per cent	100		0		1/6	в
10 Brighton Aquarium [L.]	10			10%	11%	80
Stk. Cent. of New Jersey Con. Mort	100		0		69	в
Stk. Cent. Pacific of Calif., lat Mort. 6 p.c.			0		108	82
25 City of London Real Property [L.]	12	0	0	11/4	8	в
25 Copper Miners of Eng. (7 p. c. pref.)	25	0	0		-	ш
5 Diamond Rock Boring	4		0		214	8
15 English and Foreign Credit	8		0			ш
16 Fore Street Warehouse [L.]	14	0	0	9	10	E
15 Foster, Porter, and Co. [L.]	10		0	11	12	п
& Gen. Phos. & Chem. Works Co. [L.]	- 8		0		-	в
1 Greenhill [L.]	1		0		1%	в
& Kit Hill Tunnel [L.]	1		0		1%	в
17 Hudson's Bay Company	17			19%	10%	ш
10 Huntington Copper and Sul, Co	9	0	0	816	7%	я
Stk. Illinois Central, \$100 shares	100	0	0	73	74	ш
Stk. Illinois & St. Louis Bridge, lat Mort.	100		0		84	в
Stk. Ditto, 2nd Mort., 7 per cent	100		0		54	в
Stk. Illinois Cent. Sinking Fund, 5 p. cent.	100		0		96	в
Stk. Ditto, 6 per cent	100		0		109	в
7% Imperial Credit [L.]	7	10	0	714	7%	а
- Ditto, Surplus Certificate		-			6%	в
Stk. Lehigh Val. Con. Mort., A, 6. p. cent.	100		0		2.02	и
10 Milner's Hafe (L.)	10		9		10	в
25 National Discount [L.]	. 5		0			н
Btk. N. Cent. Hail. Con. Mort., 6 per cent.	10		0		88	ш
10 Pawson and Co. [L]	- 6			1/4 0	in. %	п
50 Peninsular and Oriental Steam	50		0		61	м
8tk. Pennsyl Gen. Mort. 6 p. cent., 1910.	100	0	9	105	107	10
8tk. Ditto, Con. Sink. Fund, 6 p. ct., 1905	100		0		96	18
Stir. Scottish Aust. Investment Company.	100		0		185	и
Mtk. Ditto, 6 per cent. Preference	100		0	37		в
10 Silber Light (ord. su.;	10		0		_	1
20 Suez Canal shares	20	0	0		28	
12 Telegraph Construe. & Mainte. [L.]	13	0	9	2716	2%	18
& Ditto, Second Bonus Three per Cents	. 6	0	0	2%	2016	- 18
10 Tuarete Sulphur and Copper Co	10			19%	1.06	-
His . Union Pacific Land Grant, Ist Mort.	100		9		1:8	10
HER. Union Pacific Hallway, 1st Mort	100	0	0	103	Vi. D.	л